

GAO

Report to the Chairman, Committee on
the Budget, U.S. Senate

December 2004

CAPITAL FINANCING

Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns



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Highlights of [GAO-05-55](#), a report to the Chairman, Committee on the Budget, U.S. Senate

Why GAO Did This Study

ESPCs finance energy-saving capital improvements, such as lighting retrofits for federal facilities, without the government incurring the full cost up front. Partnerships tap the capital and expertise of the private sector to develop real property. This report describes (1) what specific attributes of ESPCs and partnerships contributed to budget scoring decisions, (2) the costs of financing through ESPCs compared to the costs of financing via timely, full, and up-front appropriations, and (3) how ESPCs and partnerships are monitored. Using case studies, GAO reviewed GSA and Navy ESPCs and DOE and VA partnerships.

What GAO Recommends

GAO recommends that OMB require and suggests Congress consider requiring agencies that use ESPCs to present an annual analysis comparing the total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. GAO also recommends (1) OMB work with scorekeepers to develop a scorekeeping rule to ensure that the budget reflects the government's full commitment for partnerships and (2) agencies perform business case analyses and ensure that the full range of funding alternatives, including useful segments, are analyzed when making capital financing decisions. Case study agencies had mixed comments on this report.

www.gao.gov/cgi-bin/getrpt?GAO-05-55.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Susan Irving at (202) 512-9142 or IrvingS@gao.gov.

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What GAO Found

Energy savings performance contracts (ESPC) and public/private partnership arrangements we examined were authorized by Congress and did not require reporting of the full, long-term costs up front in the budget. ESPCs are financed over time through annual cost savings from energy conservation measures (ECM) and only their initial-year costs must be recognized up front. OMB policy determined how agencies obligated ESPCs in their budgets. With partnerships, agencies sometimes used short-term leases to acquire assets constructed for the government's long-term use and benefit. As a result, budgetary decisions may favor alternatively financed assets. However, spreading costs over time enabled agencies to acquire capital that might not have been obtainable if full, up-front appropriations were required.

A number of factors may cause third-party financing to be more expensive than timely, full, and up-front appropriations. For example, a higher rate of interest is incurred by using ESPCs and partnerships than if the same capital is acquired through timely, full, and up-front appropriations. For our six ESPC case studies, the government's costs of acquiring assets increased 8 to 56 percent by using ESPCs rather than timely, full, and up-front appropriations. However, officials noted that there are opportunity costs, such as foregone energy and maintenance savings, associated with delayed appropriations, but there are insufficient data to measure this effect. For ESPC and partnership case studies, agency officials said they did not specifically consider or request full up-front appropriations because they did not believe funds would be available in a timely manner and because alternative mechanisms were authorized. An evaluation of funding alternatives on a present value basis could have helped agencies determine the most appropriate way of funding capital projects.

Implementation and monitoring of ESPCs is a relatively uniform process. Since partnerships take a variety of forms, their implementation and monitoring is more complex. Although third-party financing can make it easier for agencies to manage within a given amount of budget authority, it also increases the need for effective implementation and monitoring by agencies to ensure the government's interests are protected.

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United States Government Accountability Office
Washington, D.C. 20548

December 16, 2004

The Honorable Don Nickles
Chairman
Committee on the Budget
United States Senate

Dear Mr. Chairman:

As you know, one of the major recommendations of the 1967 Commission on Budget Concepts dealt with coverage of the budget. According to the Commission, the “budget should...be comprehensive of the full range of Federal activities. Borderline agencies and transactions should be included in the budget unless there are exceptionally persuasive reasons for exclusion.” With specific regard to capital investments, the Commission recommended strongly against a capital budget that would spread outlays over an asset’s life, noting that it would likely “distort decisions about the allocation of resources.” We have long supported an inclusive budget that discloses up-front the full commitments of the government.¹ However, in an era of limited resources and growing mission demands, Congress has authorized agencies to use approaches other than full, up-front funding to finance capital acquisitions such as land improvement projects, buildings, and equipment.² Accordingly, these alternative financing mechanisms³ have been used by agencies to acquire assets by spreading the cost over a number of years in their budgets. Thus, the full cost of an asset is not presented or recognized⁴ in the budget at the

¹GAO, *Budget Issues: Budgeting for Federal Capital*, [GAO/AIMD-97-5](#) (Washington, D.C.: Nov. 12, 1996); *Accrual Budgeting: Experiences of Other Nations and Implications for the United States*, [GAO/AIMD-00-57](#) (Washington, D.C.: Feb. 18, 2000); and *Fiscal Exposures: Improving the Budgetary Focus on Long-Term Costs and Uncertainties*, [GAO-03-213](#) (Washington, D.C.: Jan. 24, 2003).

²For purposes of this report, capital assets exclude investments in high technology assets, such as information technology, and assets owned by state and local governments, such as highways.

³In this report, alternative financing mechanisms refer to ways of financing capital assets other than through full, up-front appropriations. For more information on this, see GAO, *Budget Issues: Alternative Approaches to Finance Federal Capital*, [GAO-03-1011](#) (Washington, D.C.: Aug. 21, 2003).

⁴The federal budget uses budget authority, obligations, and outlays to measure costs.

time the decision is made to acquire it.⁵ As a result, resource allocation decisions made through the budgeting process may not consider the full financial commitment the U.S. government is making and, consequently, assets financed through alternative approaches may be preferred over other equally worthy projects that are competing for full funding.

From an agency's perspective, the ability to record the acquisition costs of a capital asset over the life of that asset can be very attractive because the capital asset could be obtained without first having to secure sufficient appropriations to cover the full cost of that asset. From the agency's standpoint, absorbing the entire cost of these relatively high-priced assets in a single year's budget may seem prohibitively expensive, particularly in light of the long-term benefits of the assets. Accordingly, alternative financing mechanisms are frequently desirable to agencies because they make it easier for them to quickly meet mission capital demands within a given amount of budget authority. From a governmentwide budget perspective, however, the situation can be different. The costs associated with these financing approaches may be greater than would be the case with timely, full, and up-front budget authority due, in part, to higher interest costs.⁶ This is of particular concern at a time of rising budget deficits and concern about underrecognition of long-term costs and commitments. Moreover, when capital costs are not fully recognized up-front, before funds are committed, important information about the full budgetary effects may not be considered as trade-offs are made among competing priorities. For the purchase of any given capital equipment, agencies receive the same program benefits regardless of the financing approach used.

⁵In cases that involve only noncash transactions, an agency may never incur a monetary cost that is recognized in the federal government's cash- and obligations-based budget.

⁶Budget authority is the authority provided by law to incur financial obligations that will result in outlays.

Agencies have estimated restoration and repair needed to address the alarming state of deterioration of many federal assets to be in the tens of billions of dollars.⁷ Given this estimate agencies have relied heavily on costly leasing instead of ownership to meet new needs. Since the budget scorekeeping rules⁸ were established, decision makers have struggled to address agencies' tendencies to choose operating leases instead of ownership. One option we have suggested be considered would be to recognize that many operating leases⁹ are used for long-term needs and should be treated on the same basis as purchases. This would entail scoring up front the payments covering the same time period used to analyze ownership options. We have suggested this scoring for those leases that are perceived by all sides as long-term federal commitments so that all options are treated equally.¹⁰ Although this could be viable, there would be implementation challenges if this were pursued, including the need to evaluate the validity of agencies' requirements based on their long-term plans. Finding a solution for this problem has been difficult.¹¹ While leasing to meet long-term needs almost always results in excessive long-term costs to taxpayers and does not necessarily reflect the best approach to capital asset management, it also provides the government opportunities

⁷GAO, *High-Risk Series: Federal Real Property*, [GAO-03-122](#) (Washington, D.C.: Jan. 2003).

⁸Budget scorekeeping rules or guidelines are used by the House and Senate Budget Committees, the Congressional Budget Office (CBO), and the Office of Management and Budget (OMB) (the scorekeepers) to measure compliance with the Congressional Budget Act of 1974, as amended, and the Balanced Budget and Emergency Deficit Control Act of 1985, as amended. The purpose of the guidelines is to ensure that the scorekeepers measure the effects of legislation on the deficit consistent with established scorekeeping conventions and with the specific requirements of those acts. These rules are reviewed annually by the scorekeepers and revised as necessary to adhere to the purpose. They cannot be changed unless all of the scorekeepers agree. In addition, OMB publishes instructions on the budgetary treatment of lease purchases and leases of capital assets.

⁹See figure 1 on page 12.

¹⁰GAO, *Public Buildings: Budget Scorekeeping Prompts Difficult Decisions*, [GAO/T-AIMD-GGD-94-43](#) (Washington, D.C.: Oct. 28, 1993) and *Federal Aircraft: Inaccurate Cost Data and Weaknesses in Fleet Management Planning Hamper Cost Effective Operations*, [GAO-04-645](#) (Washington, D.C.: June 18, 2004).

¹¹Another option would be for agencies to establish capital acquisition funds to pursue ownership where it is advantageous, from an economic perspective. We discussed this option in 2000. See GAO, *Federal Aircraft: Inaccurate Cost Data and Weaknesses in Fleet Management Planning Hamper Cost Effective Operations*, [GAO-04-645](#) (Washington, D.C.: June 18, 2004). See also GAO, *Accrual Budgeting: Experiences of Other Nations and Implications for the United States*, [GAO/AIMD-00-57](#) (Washington, D.C.: Feb. 18, 2000).

to spend more on other mission objectives. This same problem arises for any asset that is acquired to meet long-term needs.

In August 2003, based on your request, we issued a report that identified and briefly described 10 different capital financing approaches used by 1 or more of 13 federal agencies.¹² Subsequently, as requested, we have analyzed in greater detail two of the identified approaches: Energy Savings Performance Contracts (ESPC)¹³ and public/private partnerships (partnerships).¹⁴ In particular, we determined (1) what specific attributes of ESPCs and partnerships contributed to budget scoring decisions, (2) the costs of financing through ESPCs and partnerships compared to the costs of financing via timely, full, and up-front appropriations, and (3) how ESPCs and partnerships are implemented and monitored.

¹²GAO, *Budget Issues: Alternative Approaches to Finance Capital*, GAO-03-1011 (Washington, D.C.: Aug. 21, 2003).

¹³An ESPC is a contracting method that allows a contractor to incur the up-front costs of implementing energy savings measures, such as lighting retrofits and ventilation systems at federal facilities, and for the government to repay these costs over time through related energy savings (42 U.S.C. § 8287). To streamline the procurement process, the U.S. Department of Energy's Federal Energy Management Program (FEMP) awarded indefinite-delivery, indefinite-quantity (IDIQ) contracts—Super ESPCs—to a number of energy service companies (ESCO). With these umbrella contracts in place, federal agencies can place and implement delivery orders against the contracts in a fraction of the time it takes to develop a stand-alone ESPC. See appendix II for examples.

¹⁴Partnerships tap the capital and expertise of the private sector to improve or redevelop federal real property assets. Partnerships are sometimes used when excess capacity exists within an asset and existing government facilities do not adequately satisfy the current or potential future needs. Ideally, the partnerships are designed such that each participant makes complementary contributions that offer benefits to all parties. In some instances, Congress has enacted legislation specifically authorizing partnerships (e.g., The Public Buildings Cooperative Use Act of 1976, as amended. 40 U.S.C. § 3306). In other circumstances, an agency may rely on its existing authorities to enter into a partnership (e.g., DOE has its own authority to transfer land. 42 U.S.C. § 2201(g)). See appendix III for examples.

To obtain the detail necessary to respond to this request, we used a case study approach, which does not allow us to generalize our findings across the government. In order to understand the budgetary treatment and oversight of ESPCs and partnerships, we reviewed relevant legislation, ESPC files, partnership agreements, and relevant guidance issued by agencies and the Office of Management and Budget (OMB). We selected case studies from agencies that had awarded a large dollar volume of ESPCs awarded under the Department of Energy's (DOE) Federal Energy Management Program's (FEMP) umbrella contract, had broad partnership authority, or were discussed in our prior report.¹⁵ We also interviewed staff within the General Services Administration (GSA), the Department of Defense (DOD), the Department of Veterans Affairs (VA), the Department of Energy (DOE), the Congressional Budget Office (CBO), and OMB to understand the features of ESPCs and partnerships, and how the arrangements were scored. In addition, we spoke with representatives of Energy Service Companies (ESCO) and UT-Battelle, agency contractors involved in our case studies. In total, we analyzed 11 case studies—6 ESPCs and 5 partnerships—across 4 agencies. Because of our focus on budget scoring, our analysis was confined to the government's acquisition cost and was not a cost-benefit analysis.¹⁶ To analyze ESPC costs, we reviewed the delivery orders of each of our six ESPC case studies. Although we were able to analyze ESPC costs and savings, we were unable to perform a similar analysis of the partnerships we reviewed because we were unable to evaluate claims that other factors, such as lower labor costs and fewer bureaucratic requirements available to private partners, may have reduced costs. All of the partnership case studies we reviewed were executed before OMB's 2003 changes to its instructions on the budgetary treatment of lease-purchases and leases of capital assets. According to OMB staff, some of these partnerships may have been scored differently under the revised instructions. Our work was done in accordance with generally accepted government auditing standards, from September 2003 through November 2004, in Washington, D.C., Atlanta, Ga., Oak Ridge,

¹⁵See GAO, *Budget Issues: Alternative Approaches to Finance Federal Capital*, [GAO-03-1011](#) (Washington, D.C.: Aug. 21, 2003).

¹⁶Since the budget measures only cashflows, the benefits with which these costs are compared, based on policy makers' judgment, must be presented in materials that are supplementary to the budget, in a cost-benefit analysis. Such an analysis compares the costs and benefits of investments, programs, or policy actions in order to determine which alternative(s) maximize net benefits. Cost-benefit analysis attempts to consider the net present value of costs and benefits, regardless of whether they are reflected in market transactions.

Tenn., and Port Hueneme, Calif. A complete description of our objectives, scope, and methodology can be found in appendix I. Appendix II provides a summary of our ESPC case studies and appendix III summarizes our partnership case studies. Written comments from DOD, DOE, GSA, and VA are reproduced and addressed in appendixes IV through VII. OMB provided oral comments. We have incorporated these comments as appropriate throughout. Key contributors to this report are listed in appendix VIII.

Results in Brief

For all of the case studies we reviewed, Congress had enacted legislation that authorized agencies to enter into ESPCs or partnerships. Accordingly, many of the ESPC and partnership arrangements we examined were structured to include specific attributes that did not require agencies to reflect the full, up-front costs in the budget even though they have features indicative of long-term commitments. For example, agencies had statutory authority to purchase new equipment through ESPCs over a 25-year period without an appropriation for the full amount of the purchase price¹⁷ and OMB has directed that ESPCs should be obligated on an annual basis. With respect to several of the partnerships we examined, scoring decisions were driven by the transfer of government land from federal agencies to third parties. Both VA and DOE used existing authorities to transfer land to nonfederal entities.¹⁸ In some cases, the agencies then leased back, in short-term increments, assets constructed on the land to ensure that annual lease payments rather than the full, up-front costs of the assets were scored. Regardless of how these transactions were structured, they had features that indicate a long-term commitment by the government. For example, agencies will retain control of capital assets acquired through ESPCs. Some of the partnerships we examined were completely invisible in the budget because they involved noncash consideration. Because the budget does not reflect up-front the full costs of ESPCs and partnerships, decision makers may not be able to weigh the full costs of capital acquisitions against their potential benefits nor consider the full financial commitment that the government is undertaking. This can make comparisons to other proposed acquisitions difficult and can lead to a

¹⁷42 U.S.C. § 8287.

¹⁸VA used its enhanced-use lease authority, 38 U.S.C. §§ 8161 – 8169 and DOE used its authority under the Atomic Energy Act to transfer land, 42 U.S.C. § 2201(g).

situation in which budget decisions may favor alternatively financed capital over programs that include their full costs up-front in the budget.

Officials from each of our case study agencies agreed that timely, full, and up-front appropriations were the least-cost alternative for financing capital acquisitions. A number of factors may cause these alternative financing approaches to be more expensive than timely, full, and up-front appropriations. For example, case study agencies incurred a higher rate of interest by using ESPCs and partnerships than if they had obtained that same capital through timely, full, and up-front appropriations because of their reliance on private financing as opposed to Department of the Treasury financing. Also, for our ESPC case studies, the government likely incurred additional costs for the measurement and verification (M&V)¹⁹ of equipment performance. For our six ESPC case studies, the government's costs of acquiring energy conservation measures (ECM), such as lighting retrofits and ventilation systems, increased by 8 to 56 percent by using ESPCs rather than timely, full, and up-front appropriations. None of the partnership case studies lent themselves to this type of cost analysis for various reasons. Some of the partnerships did not involve cash consideration. For others, while the government incurs a higher interest rate as a result of the partnership, it is uncertain whether the project as a whole is more or less expensive because the extent to which other factors cited by agencies—such as lower labor costs and fewer bureaucratic requirements—could make partnership financing less expensive.

Additionally, some agency officials said that ESPCs and partnerships can be cost effective because they allow agencies to acquire capital if appropriations are not immediately available and reduce the government's financial risk if the agency no longer needs the asset. Although for both ESPCs and partnerships, agency officials agreed they could acquire capital less expensively through timely, full, and up-front appropriations, they did not specifically request full, up-front appropriations to finance the capital projects we reviewed. Frequently they said this was because they did not believe funds would be available in a timely manner, that there are costs such as higher utility bills associated with delayed appropriations, and that they had statutory authority to use the alternative financing mechanisms.

¹⁹Implementing M&V strategies is required in federal ESPCs. Since energy savings are guaranteed, the legislation requires the contractor to verify the achievement of energy cost savings each year.

FEMP has issued uniform guidelines for implementing and monitoring ESPCs. Under this uniform process, agencies rely heavily on the ESCOs to recommend potential ECMs, install the equipment, and then verify that the improvements yield intended results. In contrast, partnerships take a variety of forms and thus uniform implementation and monitoring of these arrangements is difficult. In general, however, partnership arrangements entail a government agency engaging a third party to, among other things, renovate, construct, operate, or maintain a public facility. Such relationships increase the need for effective oversight to ensure the government's interests are protected. Although we did not find any instances of fraud, waste, or abuse, the structure of ESPCs is such that they may be compromised by potential conflicts of interest of contractors that determine what equipment is needed and then monitor the performance of the equipment that they recommend, install, and guarantee. Partnerships also require monitoring because of the complicated relationships involved. For example, at DOE's Oak Ridge National Laboratory (ORNL), officers of ORNL's management and operations (M&O) contractor—UT-Battelle, LLC, (1) recommended the transfer of land free of charge to another organization—UT-Battelle Development Corporation (UTBDC) and (2) served as officers of UTBDC, which received the land. In addition, two of the five partnerships we reviewed prepared no business case analysis to ensure the government's interests were protected. Following leading capital planning practices,²⁰ including an evaluation of alternatives to satisfy capital needs, could help agencies determine whether third-party financing is the most appropriate way of acquiring capital. Three of the six ESPC case studies paid a significant portion of the total contract cycle costs²¹ in the first year of the contract. While these large buy-downs of principal allowed agencies to lessen their interest costs, they could also imply opportunities exist to acquire ECMs in smaller, useful segments²²—when technically feasible—with timely, full, and up-front appropriations for each of these segments instead of through ESPCs. None of the case study agencies considered acquiring the assets we reviewed in useful segments.

²⁰GAO, *Executive Guide: Leading Practices in Capital Decision-Making*, [GAO/AIMD-99-32](#) (Washington, D.C.: Dec. 1998).

²¹In this report, contract cycle costs refer to the total costs the government is committed to paying over the life of the contract.

²²OMB Circular A-11 defines a useful segment as an economically and programmatically separate component of a capital investment that provides a measurable performance outcome for which benefits exceed the costs, even if no further funding is appropriated.

Given the recent extension of ESPC authority until the end of fiscal year 2006 and the competing pressures Congress faces to support energy-saving investments while at the same time seeking to ensure budgetary transparency of full program costs, we recommend that OMB require and that Congress consider requiring agencies that use ESPCs to present to Congress an annual analysis comparing the total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. Congress could use this information in evaluating whether to further extend ESPC authority beyond its current expiration date.

We also are making a recommendation to the OMB Director to develop a scorekeeping rule to ensure the budget reflects the full commitment of the government for partnerships, considering the substance of all underlying agreements. Finally, we are recommending to the heads of case study agencies—GSA, Energy, Navy, and VA—that they ensure that business case analyses are performed and that the full range of funding alternatives are analyzed.

In a draft of this report, we had a recommendation that the Director of OMB work with scorekeepers to develop a rule that would ensure that the full commitments of ESPCs are reflected in the budget. Several agencies did not agree with this recommendation, citing concerns that such a rule would likely discourage or prevent agencies from entering into ESPCs. In light of Congress' recent expression of its current priorities by extending ESPC authority through fiscal year 2006, we dropped this recommendation with respect to ESPCs and included instead the recommendation to OMB and the matter for congressional consideration to require agencies to annually compare total contract cycle costs of ESPCs, with estimated up-front costs for the same ECMs.

We obtained comments from OMB and our case study agencies—DOD, DOE, VA, and GSA. OMB agreed in concept with our first recommendation that OMB work with scorekeepers to develop a rule for partnerships that would ensure the budget reflects the full commitment of the government, considering the substance of all underlying agreements. DOE and VA disagreed with this recommendation based on concerns that such a rule would effectively make alternative financing unavailable to federal agencies. While it is not our intent to discourage or eliminate partnerships with the private sector, recognizing the full commitment up-front in the budget enhances transparency and enables decision makers to make appropriate resource allocation choices among competing demands that all

have their full costs recorded in the budget. GSA did not address this recommendation in its comments. DOE, GSA, and VA agreed at least in part with our final recommendation, that case study agencies should perform business case analyses to ensure the full range of funding alternatives are analyzed when making capital financing decisions. DOD disagreed with this recommendation and OMB did not address it in its comments. Business case analyses are well accepted as a leading practice among public and private entities and OMB requires all executive branch agencies to prepare such analyses for major investments as part of their budget submissions to OMB. Therefore, we believe our recommendation is appropriate.

Written comments from DOD, DOE, GSA, and VA are included and addressed in appendixes IV through VII. Representatives from OMB provided oral comments. We have incorporated changes as a result of these comments throughout, as appropriate.

Background

The extent to which capital costs are reflected in the budget depends on how they are “scored.” CBO and OMB separately “score” or track budget authority, receipts, outlays, and the surplus or deficit estimated to result as legislation is considered and enacted. CBO develops estimates of the budgetary impact of bills reported by the different congressional committees. For the many individual transactions done under existing authorities (thus not requiring annual legislation), CBO’s estimates play no role in determining how much budget authority must be obligated.²³ However, OMB interprets the scorekeeping guidelines to determine the costs that should be recognized and recorded as an obligation at the time the agency signs a contract or enters into a lease. It is not always obvious whether a transaction or activity should be included in the budget. Where there is a question, OMB normally follows the recommendation of the 1967 President’s Commission on Budget Concepts to be comprehensive of the full range of federal agencies, programs, and activities. However, under some circumstances, it may choose not to record obligations and outlays up front.

²³Obligations are binding agreements that result in outlays (payments), immediately or in the future. Budgetary resources must be available before obligations can be incurred legally.

Budget scorekeeping rules and OMB instructions on the budgetary treatment of lease-purchases and leases of capital assets are published in OMB Circular A-11. Revised in 2003 to address lease-backs from partnerships, among other things, these instructions consider both the government's legal obligation and how risk is shared between the government and the contractor for three types of leases: capital leases, lease-purchases, and operating leases. The instructions state that when agencies enter into a capital lease contract or lease-purchase,²⁴ budget authority is scored in the year in which the authority is first made available in the amount of the net present value of the government's total estimated legal obligations over the life of the contract. Alternatively, for operating leases that include a cancellation clause, agencies only need budget authority sufficient to cover the first year's lease payments, plus cancellation costs. Figure 1 summarizes the criteria and other guidelines for defining an operating lease.

²⁴A capital lease is any lease other than a lease-purchase that does not meet the criteria of an operating lease. Lease-purchase means a type of lease in which ownership of the asset is transferred to the government at or shortly after the end of the lease term. Such a lease may or may not contain a bargain-price purchase option.

Figure 1: Definition of an Operating Lease

An operating lease meets all the following criteria:^a

- Ownership of the asset remains with the lessor during the term of the lease and is not transferred to the government at or shortly after the end of the lease term.
- The lease does not contain a bargain-price purchase option.
- The lease term does not exceed 75 percent of the estimated economic life of the asset.^b
- The present value of the minimum lease payments over the life of the lease does not exceed 90 percent of the fair market value of the asset at the beginning of the lease term.
- The asset is a general-purpose asset rather than being for a special purpose of the government and is not built to the unique specification of the government as lessee.^c
- There is a private sector market for the asset.

Source: OMB Circular A-11, Appendix B.

^aAccording to OMB's scoring instructions, if the government ground-leases property to a nonfederal party and subsequently leases back the improvements, the lease will not be considered a lease-back from a public/private partnership, as long as the lessor is a totally nonfederal entity. Such lease-backs may be treated as operating leases if they meet the criteria for an operating lease.

^bScoring instructions state that if the lease agreement contains an option to renew that can be exercised without additional legislation, it will be presumed that the option will be exercised.

^cScoring instructions state that if the project is constructed or located on government land, it will be presumed to be for a special purpose of the government.

While we have previously reported that up-front funding permits disclosure of the full costs to which the government is being committed, OMB's budget scorekeeping instructions allow costly operating leases to appear cheaper in the short term and have encouraged an overreliance on them for satisfying long-term needs.²⁵

Partnerships must conform with OMB's scorekeeping instructions. The instructions for partnerships consider the degree of private participation in the partnership to determine its scoring. Private participation is judged by the level of substantial private participation and private sector risk as evidenced by the absence of substantial government risk. Substantial private participation means (1) the nonfederal partner has a majority ownership share of the partnership and its revenues, (2) the nonfederal partner has contributed at least 20 percent of the total value of the assets owned by the partnership, and (3) the government has not provided indirect guarantees of the project, such as a rental agreement or a

²⁵See GAO, *High-Risk Series: Federal Real Property*, [GAO-03-122](#) (Washington, D.C.: Jan. 2003).

requirement to pay higher rent if it reduces its use of space. If government risk is considered high and private participation not deemed substantial, the partnership would be considered governmental for budget purposes and its transactions would be scored. Figure 2 presents OMB's illustrative criteria for assessing private sector risk.

Figure 2: Criteria for Assessing Private Sector Risk

- The following types of illustrative criteria indicate ways in which a project contains more private sector risk.
- There is no provision of government financing and no explicit government guarantee of third-party financing.
 - Risks incident to ownership of the asset (e.g., financial responsibility for destruction or loss of the asset) remain with the lessor unless the government was at fault for such losses.
 - The asset is a general purpose asset rather than being for a special purpose of the government and is not built to the unique specification of the government as lessee.
 - There is a private sector market for the asset.
 - The project is not constructed on government land.

Source: OMB Circular A-11, Appendix B.

Using ESPCs and partnerships, agencies have been allowed to spread the costs of capital assets over several years. Agencies sometimes used these financing mechanisms when they believed that timely, full, and up-front appropriations would not be made available to support capital needs. Moreover, they believe these alternative mechanisms enabled them to avoid costs, such as higher utility bills associated with waiting for appropriations. Nevertheless, several of the agencies we spoke with agree that they could acquire capital less expensively through timely, full, and up-front appropriations.

Energy Savings Performance Contracts

ESPCs finance energy-saving capital improvements²⁶ such as lighting retrofits and ventilation systems for federal facilities without the government recording the full cost up-front.²⁷ According to DOE, ESPCs have been used as an alternative financing mechanism to finance over a billion dollars of energy system upgrades and installations. Federal agencies' use of ESPCs was authorized and encouraged by both Congress²⁸ and the executive branch. In Executive Order 13123, dated June 3, 1999, the executive branch defined requirements for agencies to meet specific energy reduction goals and supported the use of ESPCs to achieve them. The Energy Policy Act of 1992 and Executive Order 13123 require federal agencies to reduce their consumption of energy in federal buildings. The act set a goal for the agencies of lowering their consumption per gross square foot by 20 percent below fiscal year 1985 baseline consumption levels by fiscal year 2000.²⁹ Executive Order 13123 requires a 30 percent reduction from 1985 levels by the year 2005 and a 35 percent reduction by 2010.

²⁶See appendix II for a more detailed description of ESPCs.

²⁷We plan on issuing a report in 2005 to the House Committee on Government Reform that will provide governmentwide information on the goals, results, and issues surrounding the use of ESPCs.

²⁸The Omnibus Reconciliation Act of 1985, Pub. L. No. 99-272, amended the National Energy Conservation Policy Act, Pub. L. No. 95-619, to authorize federal agencies to enter into ESPCs. The Energy Policy Act of 1992, Pub. L. No. 102-486, further amended the ESPC authority. Agencies' authority to enter into ESPCs was renewed on October 28, 2004 in Pub. L. No. 108-375 and is scheduled to expire October 1, 2006.

²⁹42 U.S.C. § 8253(a)(1).

Under the Energy Policy Act of 1992, federal agencies had the authority to enter into ESPCs for as long as 25 years with qualified ESCOs that purchase and install new energy systems in federal buildings. The ESCO assumes much of the up-front capital costs and, in return, receives a portion (nearly all) of the annual energy savings attributable to the improvements until the principal and interest have been repaid. The ESCOs guarantee the performance of the equipment installed, within certain parameters, for the term of the ESPC. The agency makes the payment to the ESCO from funds that the agency would otherwise have used to pay the higher utility costs (which are lower because of the ECM installed by the ESCO). Consequently, agencies argue that they will not need an increase in future appropriations relative to the current amount of appropriations in order to pay the ESCOs.³⁰

Agencies other than DOD and GSA³¹ must transfer 50 percent of the energy savings realized from energy savings performance contracts (after paying the negotiated amount to the contractor) to the Treasury. The remaining 50 percent saved may be retained and is available for additional energy and water conservation projects until expended.³²

According to FEMP, 18 federal agencies and departments have implemented ESPC projects worth \$1.7 billion. Without ESPCs, agencies would have to reassess their budget plans to accommodate investments in ECMs and/or Congress would be asked to appropriate funds today to finance investments to meet currently required energy consumption goals.

³⁰The legislation authorizing agencies to enter into Energy Savings Performance Contracts authorizes multiyear contracts for up to 25 years provided funds are available to pay for the first year of the contract. The legislation provides that “A Federal agency may enter into a multiyear contract . . . for a period not to exceed 25 years without funding of cancellation charges before cancellation, if . . . funds are available and adequate for payment of the cost of such contract for the fiscal year . . .” (42 U.S.C. § (a)(2)(D)(ii)). If a contract includes a cancellation clause in excess of \$10,000,000, the agency must provide written notification to the Congress (42 U.S.C. § (a)(2)(D)(iii)). The legislation also stipulates that an ESPC “may be paid only from funds appropriated or otherwise made available to the agency for fiscal year 1986 or any fiscal year thereafter for the payment of energy expenses (and related operation and maintenance expenses)” (42 U.S.C. § 8287a). Congress makes budget authority available on a fiscal year basis for energy expenses from which an agency pays the ESPC contractor based on the estimated savings to the government. The ESPC legislation thus permits an agency to spread the costs of the contracts over a number of years.

³¹DOD and GSA may retain and use 100 percent of all savings without further appropriation (see 10 U.S.C. § 2685(b) and 40 U.S.C. § 592(f)).

³²42 U.S.C. § 8256(c)(5)(A).

Proponents of ESPCs argue that, as an alternative financing method, these contracts help agencies overcome the problem of insufficient funding to meet federal energy reduction goals. Without ESPCs, agencies would need to adjust their program plans within expected appropriation levels to make energy efficiency improvements or possibly do nothing if the funds are unavailable in a given year. In this regard, proponents note that delays of even 1 year can result in greater utility, maintenance, and other costs. Moreover, by using ESPCs, agencies did not have to make some difficult trade-offs between purchasing ECMs and other claims on resources.

Critics of ESPCs, however, point out that for any given ECM the direct purchase of more efficient energy systems would allow all future savings to accrue to the government, rather than paying out a percentage of the savings to private contractors. In addition, the government incurs certain costs in using an ESPC, such as the M&V fees paid to the contractor, that it would not necessarily incur if the energy improvements were financed up front with federal appropriations. The ESCO's also pay a higher cost of capital than the federal government. As a result, over the long term, financing ECMs through ESPCs is likely to be more expensive than acquiring them through timely, full, and up-front appropriations. Finally, dependence on the annual budget cycle is the process by which decision makers weigh competing federal priorities. Permitting ESPCs to be recorded in the budget at less than their full cost up front affects this process, possibly resulting in lower priorities receiving funding ahead of higher priorities. Not addressing some difficult resource allocation decisions is seen as an advantage to agencies. However, long-standing budget concepts hold that a budget should be a forum for resource allocation decisions and that all competing claims should be compared on a consistent basis.

CBO and OMB disagree over the appropriate budget scoring for ESPCs. CBO recognizes that the law enables agencies to use ESPCs to pay for ECMs over a period of up to 25 years without an appropriation for the full amount of the purchase price. However, the law does not prohibit scoring the full cost of the contract up front. In CBO's view, the obligation to make payments for the energy efficient equipment and the financing costs is incurred when the government signs the ESPC. Further, CBO believes it is consistent with governmentwide accounting principles that the budget reflect this commitment as new obligations at the time that an ESPC is signed. Accordingly, CBO scored recent ESPC legislation³³ such that the total (long-term) commitments to an ESCO would be counted in the budget at the time the ESPC delivery order is signed. In contrast, OMB recognizes obligations, budget authority, and outlays for ESPCs on a year-to-year basis. According to OMB staff, this decision was based on the savings component of ESPCs and agencies' statutory authority to enter into a multiyear contract even if funds are available only to pay for the first year of the contract.

Public/Private Partnerships

Partnerships are designed to tap the capital and expertise of the private sector to improve or redevelop federal real property assets.³⁴ Partnerships are sometimes used when excess capacity, such as unused land, exists within a federal asset. Ideally, the partnerships are designed such that each participant makes complementary contributions that offer benefits to all parties. From a budget scoring perspective, recording an agency's full commitments up front in the budget can be difficult because the precise level of an agency's financial commitment and control in the partnership may be unclear.

³³The relevant bills scored by CBO include H.R. 1346, 108th Cong. (2003); H.R. 1837, 108th Cong. (2003); H.R. 6, 108th Cong. (2003); H.R. 1644, 108th Cong. (2003); S. 14, 108th Cong. (2003), S. 2400, 108th Cong. (2004), and H.R. 4200, 108th Cong. (2004), all of which would extend agencies' authority to enter into ESPCs.

³⁴See appendix III for a more detailed description of partnerships.

Congress has enacted a variety of laws that provide agencies with authority to enter into partnerships with private firms. For instance, VA possesses enhanced use (EU) lease authority to outlease federal real property to private firms (see fig. 3). Alternatively, GSA possesses limited authority for specific situations. For example, GSA entered into a partnership with the Georgia Cooperative Services for the Blind to operate a food court within the Atlanta Federal Center, using authority provided by the Randolph Shepard Act.³⁵ GSA has also used authorities granted in other legislation, such as the Public Buildings Cooperative Use Act of 1976, as amended,³⁶ and the National Historic Preservation Act, as amended,³⁷ to work with nonfederal partners. Despite the significance of GSA's role in federal property management, its limited authority to enter into partnerships has prevented it from taking a substantive role in partnership activities.

Figure 3: Elements of VA's EU Lease Authority

The Secretary of VA has unique statutory authority (38 U.S.C. §§ 8161 - 8169) to enter into long-term agreements called "enhanced use" leases. The basic elements of this authority are

- The leases can be for up to 75 years in instances of new or substantial construction;
- The real property must be controlled by VA;
- The lease allows for non-VA uses or activities on VA property;
- The overall lease must enhance a VA mission or program;
- In return for the lease, VA may obtain monetary consideration, services, or facilities or other benefits from the operation of the non-VA uses so long as the consideration is determined by the Secretary as being "fair consideration;" and
- Upon expiration of the enhanced use lease, all improvements become the property of VA.

Source: Department of Veterans Affairs.

Proponents of partnerships argue that the approach provides a realistic, less costly alternative to leasing when planning and budgeting for real property needs. Proponents also note that federal partners benefit from improved, modernized, or new facilities plus a minority share of the income stream generated by the partnership or use of the asset at a lower cost than a commercial lease.

³⁵20 U.S.C. § 107.

³⁶40 U.S.C. § 3306.

³⁷16 U.S.C. § 470a.

Critics of partnerships caution that these ventures are not the least expensive means of meeting capital needs, although they may appear to be in the short term. They remind policymakers that up-front funding with appropriated funds is the least expensive way to obtain assets and results in the inclusion of the government's long-term commitments in the budget.

Our prior work has shown that, as part of a capital review and approval process, leading organizations develop decision packages, such as business case analyses, to justify capital project requests.³⁸ A business case analysis is a planning and decision support tool used to ensure that (1) the objectives for a proposed facility-related investment are clearly defined, (2) a broad range of alternatives for meeting the objectives are developed, (3) the alternatives are evaluated to determine how well the objectives will be met, and (4) trade-offs are explicit. The overriding purpose of a business case analysis is to make transparent to the various decision making and operating groups all of the objectives to be met by the investment, the underlying assumptions, and the attendant costs and potential consequences of alternative questions. Business case analyses are supported by detailed economic and financial analyses such as cost-benefit, return on investment, life-cycle cost, and comparative alternative analyses, and recommend the most cost-effective option.

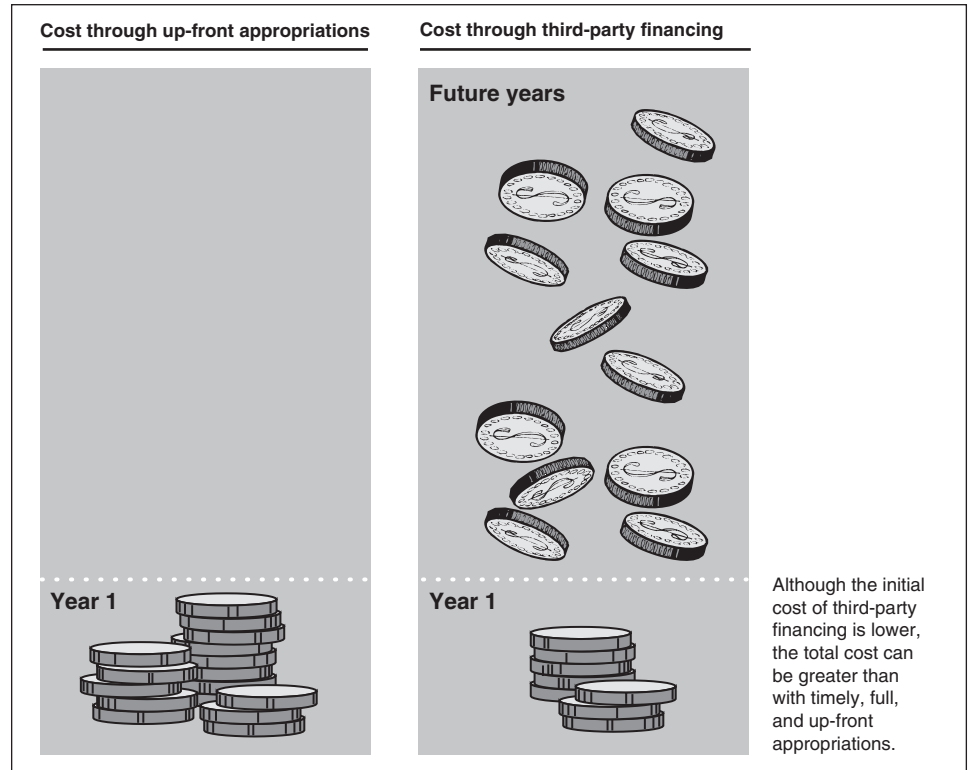
³⁸GAO, *Executive Guide: Leading Practices in Capital Decision-Making*, [GAO/AIMD-99-32](#) (Washington D.C.: Dec. 1, 1998).

Various Features Enabled Agencies to Delay Recognition in the Budget

ESPCs and partnership arrangements were authorized by Congress. With these arrangements, both the government and third parties share the risk of a long-term financial commitment. However, agencies were not required to reflect the full cost of these commitments up front in the budget when the commitments were being made. For example, ESPCs finance energy-efficient equipment over time by using savings in agencies' utility bills to repay ESCOs for the up-front equipment and installation costs. Because the ESCOs are repaid over time, the full up-front costs of ECMs are not reflected in the budget. (Fig. 8 on page 55 illustrates how ESPCs affect agencies' cash flows before, during, and after the contract term.) With respect to most of the partnerships we reviewed, scoring decisions were driven by the transfer of government land from agencies to third parties. Case study agencies sometimes leased assets in short-term increments that third parties constructed on the transferred land specifically for the government's use and benefit. As a result, the full cost of the assets were not required to be reflected in the budget.³⁹ Given that the federal budget is primarily measured on a cash and obligations basis, some of the partnerships we examined were completely invisible in the budget because they involved noncash transactions. The financial commitment of the government is illustrated in figure 4—although costs through third-party financing that appear in the budget may be initially lower, the government is committed to years of future payments.

³⁹All of the partnerships case studies we reviewed were executed before OMB's 2003 changes to its instructions on the budgetary treatment of lease-purchases and leases of capital assets. According to OMB staff, some of these partnerships may have been scored differently under the revised instructions.

Figure 4: Third-Party Financing Delays Recognition of Full Costs to Taxpayers



Although the initial cost of third-party financing is lower, the total cost can be greater than with timely, full, and up-front appropriations.

Sources: GAO and Art Explosion(images).

ESPC Commitments Are Not Fully Recognized Up Front in the Budget

ESPCs represent long-term commitments of the government. Agencies generally retain control of capital assets acquired through ESPCs for their entire life cycle, and frequently contractors transfer title of the assets to the government after the assets are installed and accepted by the government. Moreover, the term of ESPC delivery orders spans as long as 25 years. Finally, agencies' termination liability for ESPCs typically corresponds to their outstanding principal balance.

Although these arrangements represent long-term commitments, funds for ESPCs are obligated on an annual basis. Therefore, the budget does not recognize the government's long-term commitment up front, when decisions are made. This policy was formalized in a 1998 OMB memorandum⁴⁰ that stated ESPC obligations, budget authority, and outlays would be recognized on an annual basis. The memorandum did not discuss OMB's rationale for scoring ESPCs in this manner. According to OMB staff, this memorandum reflected OMB's early examination of the issues. Specifically, the policy was based on the savings component of the contracts and the statutory authority to enter into a multiyear contract even if funds are available only to pay for the first year of the contract.

Long-term Partnership Arrangements Were Not Fully Recognized Up Front in the Budget

Capital assets acquired through the partnership arrangements we reviewed were structured such that third parties have an ongoing, long-term relationship with the government. However, OMB's budget scoring instructions required that only the short-term costs associated with assets acquired through case study partnerships be scored in the budget. As shown previously in figure 1, the definition of an operating lease (which permits obligations to be scored annually) specifies that the lease term may not exceed 75 percent of the estimated economic life of the asset. Assets we reviewed were constructed in areas where case study agencies have long maintained a presence and have a continuing mission. It seems unlikely that the agencies will vacate or abandon these assets before the end of their economically useful lives. To the extent agencies continue to occupy leased spaces, the 75 percent criteria for an operating lease may be exceeded.

For example, through a series of transactions, DOE entered into a partnership with the nonprofit UT-Battelle Development Corporation (UTBDC) to revitalize its Oak Ridge National Laboratory (ORNL) in the state of Tennessee.⁴¹ ORNL was first established in 1943 and is DOE's largest science and energy laboratory. Many of the buildings on the ORNL reservation have become obsolete, dilapidated, and expensive to maintain. Accordingly, UTBDC arranged for the sale of bonds through Keenan

⁴⁰Jacob J. Lew, Acting Director, Office of Management and Budget, *Memorandum for the Heads of Executive Departments and Establishments on Federal Use of Energy Savings Performance Contracts*, (Washington, D.C.: July 25, 1998).

⁴¹See appendix III for a full discussion of this case study.

Development Associates of Tennessee to finance and construct three general-use office buildings at ORNL (specifically to support DOE research). UT-Battelle, LLC, on behalf of DOE, leased the buildings through a series of leases extending to 25 years and involving UTBDC and Keenan. (See app. III for a full explanation of this complicated arrangement.) DOE's ORNL Project Manager told us that, even if ORNL's mission was downsized, it was unlikely that DOE would terminate any of the leases of the three new, state-of-the-art buildings to reoccupy the now empty, dilapidated buildings. Figure 5 shows one vacant office building and an artist's rendition of the revitalized ORNL reservation, including the three privately financed buildings.

Figure 5: Buildings on the ORNL Reservation



Source: GAO.^a



Source: UT-Battelle Development Corporation, annotated by GAO.^b

^aVacant office building at ORNL.

^bArtist's rendition of revitalized reservation.

Evidence of ORNL's long-term commitment is further bolstered by Standard and Poor's A+ rating of the ORNL bond issuance. The rating report stated that a strong lease revenue stream from DOE, for a period of up to 25 years, would be pledged as security for the payment of the bonds. Moreover, the unique mission of ORNL makes it unlikely that DOE will move its operations from the Oak Ridge site. DOE officials stated that the likelihood that ORNL will close during the term of the bonds is very low, so DOE is unlikely to terminate any part of the leases.

According to DOE officials, DOE transferred the government-owned land on which the buildings are located to UTBDC via quitclaim deed⁴² so that appropriations for the full, up-front costs of the three buildings were unnecessary. DOE later approved the facility subleases between UTBDC and UT-Battelle, LLC. DOE then obtained the use of the newly constructed buildings from UT-Battelle, LLC, reimbursing UT-Battelle, LLC, for the sublease rents. DOE officials told us the deal was deliberately structured with a quitclaim deed to ensure that the arrangement was scored as an operating lease rather than a capital lease.⁴³ Because OMB allowed DOE to record this arrangement as an operating lease, DOE needed to obligate only the annual cost of the lease payments, rather than the full cost of the construction.⁴⁴

⁴²A legal instrument used to release one party's right, title, or interest to another without providing a guarantee or warranty of title.

⁴³The quitclaim deed ensured the buildings would not be constructed on government land. According to budget scoring rules, if the project was constructed or located on government land, it will be presumed to be a special purpose asset of the government, and thus potentially a capital lease. However, according to OMB officials, this transfer of land may not have been necessary, since construction on government land is just one of several factors OMB considers when determining if an arrangement should be scored as a capital lease or an operating lease.

⁴⁴Budget scoring rules state that, for operating leases that include a cancellation clause, agencies need only obligate an amount sufficient to cover the first year's lease payments, plus cancellation costs. Alternatively, when agencies enter into a capital lease contract or lease-purchase, budget authority is scored in the year in which the authority is first made available in the amount of the net present value of the government's total estimated legal obligations over the life of the contract.

In another case study, VA entered into an enhanced use (EU) lease for up to 35 years with the Dekalb County Development Authority (the Authority)⁴⁵ to finance and construct VA's Atlanta Regional Office (VARO) building and parking area.⁴⁶ Dekalb County issued 35-year revenue bonds to finance the project. VA officials said construction of the new building allowed the agency to collocate its regional office with an existing VA medical center and provide enhanced "one-stop" service for veterans. Although VA leases the facilities from the Authority in 2-year increments, there is no current plan to vacate the property in the near future and the leases automatically renew unless VA takes positive action to terminate.⁴⁷ Additionally, VA agreed not to replace the regional office building financed by the Authority with another regional administration or headquarters building in Georgia using its EU leasing authority during the term of the bonds. VA may enter into another EU lease in the Atlanta region so long as the new building does not disrupt VA's occupancy within the collocated office.

VA did not need to obligate the full up-front cost of the regional office building and parking area because it used its EU lease authority to outlease the government-owned land to the Authority on which the Authority could build. VA then leased the newly constructed building and parking area from the Authority's developer through 2-year operating leases, which automatically renew for up to nine consecutive terms unless VA takes positive action to terminate the automatic renewal clause. Accordingly, OMB only required the annual lease payments and any termination costs⁴⁸ to be reflected in the budget.

⁴⁵DeKalb County is located in the state of Georgia and includes a portion of the city of Atlanta.

⁴⁶See appendix III for a full discussion of this case study.

⁴⁷VA officials informed us that they have changed this practice such that future leases will require VA to take positive action to renew rather than terminate.

⁴⁸Termination costs are represented through a "renovation reserve fund." To mitigate the risks to the Authority if VA reduces the amount of space it occupies in the VARO building, VA deposited \$1.8 million into the fund upon the date of full execution of the lease. The Authority may draw from this fund to renovate or reconfigure rental space for new tenants should VA vacate some part of the VARO during the term of the ground lease. VA officials said that the fund effectively reduced VA's rent since it reduced the Authority's risk and, thus, the amount the Authority had to borrow.

Some Partnerships May Not Be Included in the Budget Because They Involve Noncash Consideration

In some cases, partnerships are arranged for reasons other than an agency's belief that appropriations are not available. For example, VA entered into an EU lease with the City of Vancouver's Housing Authority to construct an estimated \$4 million homeless shelter on VA property.⁴⁹ In exchange, veterans receive priority placement in 50 percent of the shelter units; VA receives no cash consideration. Because VA can discharge patients into the homeless shelter rather than extending inpatient care in VA medical facilities, VA estimated that it avoids costs of roughly \$1.8 million annually. Additionally, VA anticipated that the homeless shelter would provide veterans with greater outpatient services and improve the availability of affordable housing for single homeless individuals. Because the partnership involves no cash consideration, it is not reflected in the budget.

Higher Interest Rates and Other Factors May Increase the Cost of Third-Party Financing Compared to Timely, Full, and Up-Front Appropriations

A number of factors may cause third-party financing to be more expensive than timely, full, and up-front appropriations. For example, case study agencies incurred a higher rate of interest by using ESPCs and partnerships than if they had obtained that same capital through timely, full, and up-front appropriations.⁵⁰ Also, for ESPCs, officials told us that the government likely incurred additional costs for the measurement and verification (M&V) of equipment performance. In our six ESPC case studies, use of ESPCs increased the government's costs of acquiring ECMs by 8 to 56 percent compared to the use of timely, full, and up-front appropriations. None of the partnership case studies lent themselves to this type of cost analysis because comparable data were not available. Some of the partnerships did not involve cash consideration. For others, although the government incurred higher interest costs compared to up-front funding, we did not evaluate claims that other factors such as lower labor costs and fewer bureaucratic requirements might lower costs because data were not readily available. Thus, we were unable to judge whether partnerships could be less expensive overall. For both ESPCs and partnerships, agency officials said they did not request full, up-front appropriations to finance the specific capital projects we reviewed. Frequently, they said this was because they did not believe funds would be available in a timely manner

⁴⁹See appendix III for a full discussion of this case study.

⁵⁰See appendixes II and III for a more detailed description of ESPCs and partnerships.

and they had statutory authority to use the alternative mechanisms. However, there are insufficient data to measure this effect.

Acquiring Capital through ESPCs Is More Expensive Than Acquiring the Same Capital through Timely, Full, and Up-Front Appropriations in Our Case Studies

Since the federal government's cost of capital is lower than that of the private sector, alternative financing mechanisms may be more expensive than timely, full, and up-front appropriations. Accordingly, all case study agencies could have acquired the same ECMs less expensively through timely, full, and up-front appropriations than through ESPCs.

In addition to a higher cost of capital, agencies also likely incur additional M&V costs when they finance ECMs through ESPCs rather than timely, full, and up-front appropriations. Agencies contract for M&V of energy savings financed through ESPCs because they are required to show that annual savings generated by ECMs meet or exceed annual contractor payments. M&V of savings also acts as insurance; if actual savings fall below those guaranteed by the contractor, the contractor may be obligated to take corrective actions at its own expense. Officials we spoke with said they believed that M&V resulted in higher sustained savings but is an expense that would not be incurred if the ECMs were acquired through timely, full, and up-front appropriations. Representatives from the ESCOs said that their private sector clients do not always purchase M&V, and, if they do, it is for a shorter period than contracts secured by the federal government.

Table 1 presents cost comparisons using the installation and construction price of ECMs (based on delivery order files) as a proxy estimate for timely, full, and up-front appropriations costs.⁵¹ It shows that ECMs obtained through our six ESPC case studies might be roughly 8 to 56 percent more expensive than they could have been for the same ECMs had they been obtained through timely, full, and up-front appropriations. The percentage difference between financing through ESPCs and estimated timely, full, and up-front appropriations is shown in the far right column. The difference in

⁵¹Because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

costs between the two financing mechanisms is a function of (1) the higher cost of capital incurred through ESPC financing and (2) the M&V costs incurred through ESPC financing.⁵²

Table 1: Cost Analysis of Six ESPCs

Dollars in millions, present value

ESPC project (term)	Cost of ECMs financed through timely, full, and up-front appropriations ^a	Cost of ECMs financed through ESPCs ^b	Percentage increase due to financing
Navy Region South West (10 years)	\$13.66	\$14.69	8
Patuxent River Naval Air Station (20 years)	\$4.33	\$5.77	33
Naval Submarine Base Bangor (9 years)	\$4.33	\$5.34	23
GSA Gulfport Federal Courthouse (17 years)	\$1.60	\$2.50	56
GSA North Carolina bundled sites (19 years)	\$1.39	\$1.93	39
GSA Atlanta bundled sites (20 years)	\$6.15	\$7.78	27

Source: GAO analysis of ESPC case study delivery order files.

Note: Analysis based on delivery order files as signed upon final award of contracts. In some cases, the government later modified these delivery orders to add more ECMs.

^aThis column represents the present value of the installation and construction price for the ECMs. It does not include operations and maintenance (O&M) expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the present value of the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

⁵²This comparison of costs represents a budget analysis, not a broader cost-benefit analysis. The analysis takes into account the costs incurred by the federal government, rather than total social costs and net benefits. It also assumes that an agency could acquire the same ECMs for the same price, regardless of how its acquisition is financed.

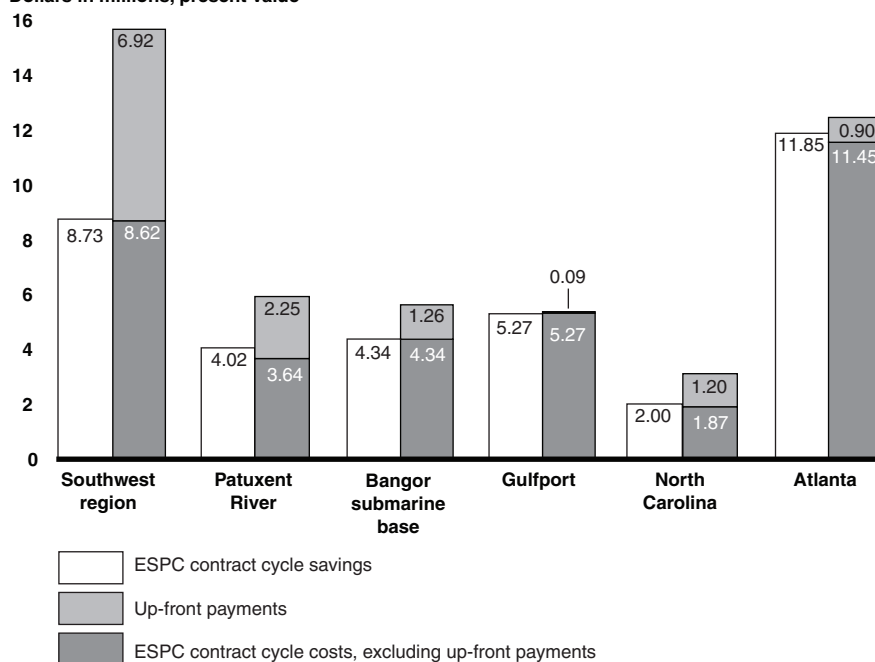
The performance of ECMs installed through the use of ESPCs are guaranteed to reduce energy use during the term of the contract so that payments to the contractor can be made from the savings from lower utility bills. ESPCs contain assumptions for such things as hours of operation and ECM efficiency which, taken together, determine estimated savings. However, if the assumptions are incorrect and estimated savings are not achieved, the agency is still required by contract to pay the ESCO the agreed-upon savings specified in the ESPC. According to agency officials, ECMs may continue to accrue savings beyond the contract cycle as they continue to operate more efficiently than the equipment they replace. The additional savings along with the savings realized during the contract cycle may cover the entire cost of the equipment. (See app. II for additional detail on verification of ESPC savings.)

As shown in figure 6, for all six ESPC case studies, contract cycle energy cost savings specified by the contractor did not fully cover total contract cycle costs (including O&M expenses) because agencies made up-front payments. All six of the case study ESPCs used a combination of funds from their existing budgets and third-party financing via an ESPC to implement packages of ECMs. The up-front payments from their existing budgets covered the difference between total contract cycle costs and savings. Accordingly, the agencies reduced the amount they had to finance through ESPCs, thereby reducing their interest payments. In the case of the ESPCs for the Bangor Naval Submarine Base and Navy Region Southwest, some of these up-front payments came out of a special appropriation provided to address energy supply shortages in the West. With respect to the ESPCs at North Carolina, Atlanta, and Patuxent River, funds used to pay down the principal on the ESPC had previously been appropriated to renovate, renew, or repair old energy consuming systems. Since implementation of the ESPC made these activities unnecessary and may be providing benefits other than costs savings, such as maintaining an acceptable level of service, the funds from the avoided costs were put toward the ESPC. According to guidance issued by DOE's Federal Energy Management Program (FEMP), agencies are permitted to use funds generated by these types of avoided costs to pay for ESPCs. For the six

ESPC case studies, up-front payments ranged between 2 and 45 percent of total contract cycle costs.⁵³

Figure 6: Contract Cycle Costs, Up-Front Payments, and Savings of Six ESPCs

Dollars in millions, present value



Source: GAO analysis of ESPC case study delivery order files.

Note: Savings amounts are specified in the delivery orders. Our analysis was based on final award of delivery order files. In some cases, the government later modified these delivery orders to add more ECMs.

⁵³For the ESPC case study at Gulfport, where up-front payments represented 2 percent of the total contract cycle costs, ECMs were installed in a newly constructed building. Thus, savings from avoided repair and renewal, which could be used to buy down principal, did not exist. Also, because it was new construction, GSA and the ESCO calculated both the baseline performance and expected savings amounts based on a model.

Full Cost of Partnerships Is Unclear

None of our five partnership case studies lent themselves to a budgetary cost analysis because comparable data were not available. Two did not involve cash transfers of any kind. In the case of the other three, it was unclear how much the projects would have cost had they used timely, full, and up-front appropriations rather than partnership financing. In these cases, agencies sometimes incurred higher interest costs by using partnership financing rather than timely, full, and up-front appropriations. For example, DOE benefited from the use of a roughly \$70 million private bond offering to finance the revitalization of three buildings at ORNL. The financing structure⁵⁴ used over the course of 25 years means DOE actually will obligate funds equaling approximately \$96 million, present value (PV). Similarly, VA will obligate funds equaling approximately \$43 million (PV) over 35 years to pay off the approximately \$33 million in bonds the Authority issued to finance the construction of an office building and parking area in Dekalb County, Ga.

However, officials said that other factors associated with partnerships, such as lower labor costs and fewer bureaucratic requirements, could make partnership financing overall less expensive than financing through timely, full, and up-front appropriations. For example, officials with DOE's M&O contractor said that, in the case of the ORNL revitalization project, greater efficiencies existed in private sector construction since the government would have had to enter into more costly union labor agreements had it financed the project through timely, full, and up-front appropriations. Similarly, a VA official said that using an EU lease to construct an energy center would be less expensive than financing the asset through timely, full, and up-front appropriations because federal labor agreements and acquisition regulations created inefficiencies in federal construction. As part of this engagement, we did not analyze these claims to determine whether the efficiencies associated with private sector construction would offset the higher interest costs of partnership financing.

⁵⁴See figure 12 on page 81.

Uncertainty and Timing of Appropriations Affect Cost Effectiveness

Some agency officials said that ESPCs and partnerships are cost effective because they allow agencies to acquire capital more quickly than through appropriations. They noted that it is uncertain when or whether timely, full, and up-front appropriations will be made available. Officials from Navy, DOE, and GSA expressed their belief that funds obtained through third parties would be available much more quickly than through appropriations. Consequently, officials said that agencies could accrue more savings and avoid more costs using ESPCs and partnerships than they would have if they had waited for appropriations. For example, Navy officials said that, had they not used ESPCs, Naval installations would have had to pay higher utility bills while waiting for appropriations to finance ECMs. Similarly, at ORNL, one DOE official pointed out that although the idea for three privately financed buildings was conceived at the same time as the highest priority federally funded building, the three privately financed buildings were completed and occupied at least a year in advance of the one funded through appropriations.⁵⁵ Other DOE officials said that the costs of maintaining obsolete, dilapidated buildings at ORNL while waiting for appropriations would have added to the cost of waiting for full, up-front appropriations.⁵⁶ Thus, according to these officials, capital obtained through ESPCs and partnerships may be less expensive relative to full, up-front appropriations than it seems.

Since the agencies did not request additional appropriations or adjust their plans to accommodate needed capital investments, it cannot be known whether agencies were correct in assuming that timely appropriations would not be available. Agencies are responsible for establishing funding priorities to achieve their missions, including capital needs and mandated energy savings. Capital plans supported by strong analysis could help them in setting priorities for funding requests.

⁵⁵According to a DOE official, part of the timing difference is due to the appropriations cycle—agency requests are submitted about 2 years before appropriations are received. One official of DOE's M&O contractor added that some of the difference is due to construction time. He said that construction overseen by private developers using a commercial model is faster than construction overseen by DOE because DOE is bound by certain inefficient labor agreements and processes that do not apply to the private sector. Both DOE and contractor officials agreed that faster construction enables DOE to more quickly vacate obsolete and dilapidated buildings, which are expensive to maintain.

⁵⁶UT-Battelle, LLC prepared an analysis of these costs, however DOE did not review this analysis. The analysis did not include an analysis of timely, up-front appropriations as an alternative.

Agencies Did Not Request Full, Up-Front Appropriations before Entering into ESPCs or Partnerships

Given the federal government's ability to obtain capital at lower interest rates than private companies, officials from each of our case study agencies agreed that timely, full, and up-front appropriations were the least-cost alternative for financing capital acquisitions. However, officials also stated that they did not request additional appropriations for the case studies we reviewed because they were authorized to use the alternative financing mechanism. Further, they did not believe appropriations would have been available in a timely manner. For example, DOE officials said that they had not requested full, up-front appropriations for certain aspects of the ORNL revitalization project because, in the past, they had tried and failed to obtain funding for similar projects. The Director of DOE's Office of Science stated that it was particularly difficult to obtain funding for general use office buildings compared to buildings specifically designed for scientific research. However, the poor condition of these general use buildings negatively affected DOE's ability to recruit and retain high-quality scientists. Because the agencies never requested appropriations for these specific projects, it is impossible to know whether their assumptions were correct.

GSA and Navy officials also said recent declines in up-front appropriations for ECMs affected their decision to use ESPCs. For example, according to GSA officials, GSA's budget authority for energy efficiency projects declined from \$20 million in fiscal year 1999 to \$4.2 million in fiscal year 2004, and it received no funds in fiscal years 2002 and 2003. They also pointed to GSA's \$6 billion backlog of identified repair and alteration needs. According to Navy officials, appropriations for its Energy Conservation Improvement Program dropped from \$21.7 million in fiscal year 1999 to zero dollars in fiscal year 2000. Although funding has increased in recent years, it still remains well below 1999 levels. According to the Director of the Navy's Energy Programs Division, the department receives less than 10 percent of the estimated \$140 million needed each year to meet energy savings goals. Navy officials said that other priorities in the Navy's budget had taken precedence over energy reduction projects. According to FEMP, ESPC projects worth \$1.7 billion have been implemented by 18 federal agencies and departments. Without ESPCs, agencies would have to reassess their budget plans to accommodate investments in ECMs and/or Congress would be asked to appropriate funds today to meet currently required energy consumption standards.

Officials also pointed out that agencies had been granted statutory authority to use ESPCs and partnerships. For example, the Energy Policy Act of 1992 authorized agencies to fund ECMs through ESPCs.

Additionally, OMB issued two memorandums encouraging agencies to use ESPCs to achieve long-term energy savings. In addition, the Atomic Energy Act granted DOE authority to give away land for mission purposes and enabled it to finance improvements on that land through private sector financing. Similarly, VA officials said that the agency's EU lease authority specifically enabled it to enter into partnerships with nonfederal sector entities to finance capital.

Different Financing Alternatives Present Different Implementation and Monitoring Challenges

Third-party financing can make it easier for agencies to manage in the short term within a given amount of budget authority but may have additional long-term costs. With ESPCs, case study agencies relied heavily on ESCOs to recommend potential ECMs, install the equipment, and then verify that the recommended improvements yield intended results. Partnership arrangements generally entail a government agency engaging another party to, among other things, renovate, construct, operate, or maintain a public facility. Such relationships increase the need for effective implementation and monitoring by agencies to ensure the government's interests are protected. For example, reliance on outside parties can leave the government open to problems resulting from conflicts of interest and presents monitoring challenges. The ESPCs and one of the partnerships we reviewed highlighted these vulnerabilities. An evaluation of funding alternatives was not always done to determine the most appropriate way of funding capital projects. Finally, VA has used partnership financing to engage in an activity that is not related to VA's mission and which it ordinarily would not fund through full, up-front appropriations.

Third-Party Financing Increases the Risk of Conflicts of Interest and Presents Monitoring Challenges

As the government teams with outside parties to acquire capital, it must ensure that its welfare is protected from conflicts of interest. ESPCs introduce concerns over conflicts of interest due to the heavy reliance upon ESCOs. Partnership arrangements can also create management challenges as outside participants gain influence over projects. Active participation and scrutiny by agencies can help ensure the government's interests are not compromised.

ESPC Process Creates Potential for Conflicts of Interest

Once agencies decide to use an ESPC and select an ESCO to work with, they must ensure that the government's interests are protected from the potential conflicts of interest that may arise from the ESCO's comprehensive role in recommending what ECMs are needed and then in monitoring and verifying the performance of the equipment that they recommended, installed, and guaranteed.⁵⁷ For example, an ESCO prepares a Detailed Energy Survey (DES), which is an investment-grade audit that determines what ECMs will be installed as part of the ESPC. This serves as the basis for the project's estimated savings, M&V, and O&M, and is used to develop the final energy project proposal. After the ESCO installs the ECMs, it measures and verifies that the contractually guaranteed savings it estimated are being achieved.⁵⁸ To ensure the government's interests were protected, staff at both GSA and the Navy reviewed documentation and participated throughout the ESPC process. Given its decentralized process for managing ESPCs, GSA uses a FEMP project facilitator for technical assistance on its ESPC delivery orders. To the extent desired by federal agencies using its Super ESPC, FEMP provides assistance through training, project development tools, and technical support.⁵⁹ According to FEMP and Navy officials, the Navy's centralized process for managing ESPCs enables it to maintain sufficient in-house technical expertise and the Navy does not typically employ FEMP's assistance. However, the Navy frequently uses FEMP's free services, such as reviewing proposals, and has purchased FEMP's support in special circumstances.

⁵⁷According to GSA and Navy officials, even if they acquired ECMs through timely, full, and up-front appropriations, they might contract with ESCOs to obtain technical expertise on the ECMs to be installed. However, with an ESPC, ESCOs not only provide expertise, they also measure and verify whether guaranteed savings are met.

⁵⁸The process for implementing an ESPC is described in greater detail in appendix II.

⁵⁹A typical suite of FEMP services costs agencies about \$30,000.

Although both GSA and the Navy took an active role in negotiating the case study ESPCs to protect the government's interests, the process by which these contracts are structured can still introduce problems resulting from ESCO's conflicts of interest. For example, case study agencies relied heavily upon the ESCOs to estimate facilities' energy use after ECM installation compared to what baseline energy use would have been if ECMs had not been installed. Projected energy savings are calculated by subtracting estimated energy use after ECMs have been installed from baseline energy use. According to FEMP guidance, these calculations should be examined in detail because they are the basis for determining whether the contractually guaranteed savings are achieved. Nonetheless, a number of Army Audit Agency reports⁶⁰ issued over the last several years stated that energy savings baselines established by the ESCOs were faulty, resulting in overpayments to the ESCO. For example, some baselines used incorrect assumptions such as overstated operating hours. Representatives from two ESCOs noted that the greater the experience of the government team, the greater the intensity of the negotiations.⁶¹ Therefore, FEMP assistance is particularly important for agencies with relatively little ESPC experience. Given agencies' reliance on the ESCOs in the ESPC process, agencies must be diligent to ensure that the government's best interests are protected. Employing best practices in using ESPCs also may provide opportunities to better ensure the government receives the best value for its investment.⁶²

⁶⁰See U.S. Army Audit Agency, *Energy Savings Performance Contracts: U.S. Army Joint Readiness Training Center and Fort Polk*, AA 01-471 (Alexandria, VA: Sept. 24, 2001); *Energy Savings Performance Contracts: XVIII Airborne Corps and Fort Bragg*, AA-02-098 (Alexandria, VA: Dec. 14, 2001); *Energy Savings Performance Contracts: U.S. Army Military District of Washington*, A-2002-0288-IMO (Alexandria, VA: July 24, 2002); and *Lessons Learned from an Energy Savings Performance Contract: U.S. Army Garrison, Alaska*, A-2004-0068-FFP (Alexandria, VA: Dec. 10, 2003).

⁶¹A representative from one of these ESCOs said that his company preferred that agency officials accompany them during the M&V process to validate savings.

⁶²We anticipate we will issue a report in 2005 that will further explore this issue.

Monitoring Challenges Existed
for Complicated ORNL
Partnership

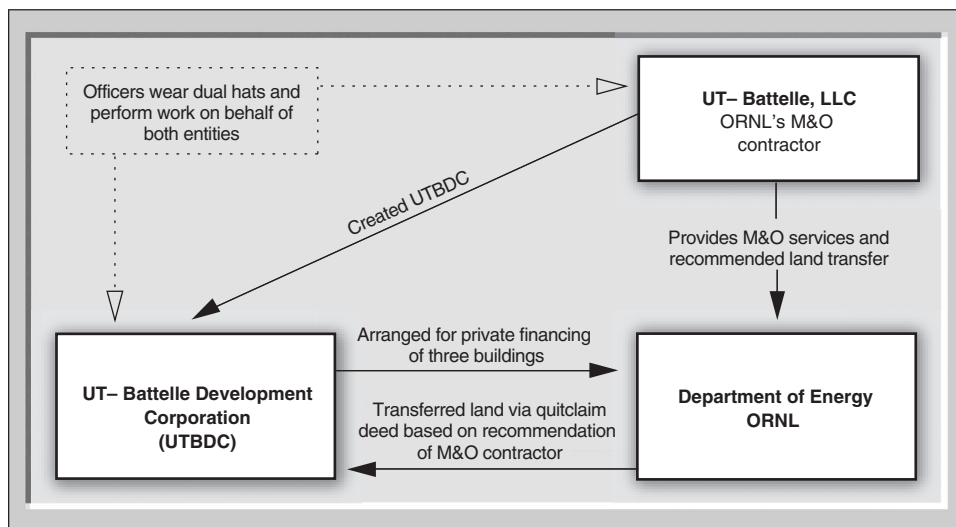
The partnership between DOE, its management and operations (M&O) contractor UT-Battelle, LLC, and UTBDC, created monitoring challenges. Although we found no evidence of fraud, waste, or abuse, these challenges were created when officers of the M&O contractor recommended that DOE transfer land, without charge, to UTBDC.⁶³ The same officers of the M&O contractor that recommended this course of action to DOE also served as officers of UTBDC, the organization that received the land. UT-Battelle, LLC, contracted with UTBDC, which arranged for the private financing to construct three general-use office buildings.

Accordingly, because the M&O contractor, not DOE, was directly involved in the contract, DOE was presented with monitoring challenges. DOE counsel both at Oak Ridge and headquarters told us that DOE's risk was minimal and that monitoring of the partnership was not necessary. At Oak Ridge, counsel told us that so long as the end product was what they wanted, DOE did not have much of a role. At headquarters, counsel told us that DOE does not provide oversight or micromanage how M&O contractors work with subcontractors. Further, we were told that DOE does not question M&O contractors' practices because DOE officials believe these contractors to be trustworthy. Nonetheless, the primary purpose of the partnership was to obtain facilities for DOE's use and ultimately the revenue stream supporting the financing will be paid through DOE appropriations.⁶⁴ Thus, we believe greater monitoring and oversight was warranted to ensure that the contractor operates in the government's best interest.

⁶³UTBDC, a special purpose, nonprofit entity, was established for the sole purpose of securing private financing of three general-use buildings on the ORNL reservation. The transfer of land was an integral component of the private financing plan. This arrangement is described in detail in appendix III.

⁶⁴See figure 12 in appendix III for an illustration of the financing stream.

Figure 7: Relationship Between ORNL Parties



Source: GAO analysis.

Business Case Analysis Needed to Ensure Third-Party Financing Is in the Government's Best Interest

Our prior work has shown that, as part of a capital review and approval process, leading organizations develop decision packages, such as business case analyses, to justify capital project requests.⁶⁵ These packages are supported by detailed economic and financial analyses such as cost-benefit, return on investment, life-cycle costs, and comparative alternative analyses, and recommend the most cost-effective option. Both OMB and our guidance stress that, when a performance gap between needed and current capabilities has been identified, it is important that organizations carefully consider how best to bridge the gap by identifying and evaluating a full range of alternatives to construct or purchase a new capital asset. This type of analysis was not always performed for the case studies we reviewed. For example, large buy-downs of ESPC principal raised questions about the need for ESPC financing. A business case analysis might have demonstrated that sufficient funds were available to purchase ECMs in smaller, useable segments, when technically feasible. In addition, not all partnerships included a business case analysis to determine whether third-party financing was the most cost-effective alternative.

⁶⁵GAO, *Executive Guide: Leading Practices in Capital Decision-Making*, GAO/AIMD-99-32 (Washington, D.C.: Dec. 1, 1998).

Large Buy-Downs of Principal Raise Questions About the Need for ESPC Financing

One key attraction for using ESPCs is that they enable agencies to acquire ECMs even if funds are available only to pay for the first year of the contract. However, three of the six case studies we reviewed obligated and paid a significant portion of the total cost of the ECMs in the first year of the contract.⁶⁶ These large buy-downs of principal avoided repair, replacement, and renovation costs as a result of implementing the ESPC. They also imply opportunities exist to acquire ECMs in smaller, useful segments, when technically feasible⁶⁷ with timely, full, and up-front appropriations instead of through ESPCs. For example, agencies could individually acquire an ECM such as an air chiller without bundling it into an ESPC. Navy and GSA officials indicated they typically did not consider financing ECMs through useful segments or through full and up-front appropriations. They also told us they did not perform a business case analysis before deciding to use ESPCs because of the administrative cost of such an analysis since they believed there was no other viable option. Officials explained that their agencies did not request full, up-front appropriations since appropriations might not have been made available in a timely manner and the use of ESPCs had been authorized. Analyzing the full range of funding alternatives would help agencies determine if acquiring ECMs in these useful segments would be a more cost-effective alternative.

As previously discussed, FEMP guidance permits agencies to apply avoided repair or replacement expenses for large equipment as one-time cost savings to buy-down principal. For three of our case studies that followed this guidance, these one-time savings were approximately 7 percent, 38 percent, and 39 percent of contract cycle costs. According to GSA and Navy officials, these funds had already been appropriated for the repair or replacement of old equipment. The ESPC made this repair or replacement unnecessary and thus freed-up funds for other uses, such as buying down the ESPC principal. Although paying down principal up-front has the benefit of reducing financing costs to the government, the availability of these funds highlights the need for an analysis of the feasibility of purchasing ECMs in useful segments rather than through an ESPC.

⁶⁶Two other ESPC case studies also paid a significant portion of the total contract cycle costs in year 1. These payments stemmed from federal funding unexpectedly made available to mitigate energy shortages in California in fiscal year 2000.

⁶⁷OMB Circular A-11 defines a useful segment as an economically and programmatically separate component of a capital investment that provides a measurable performance outcome for which the benefits exceed the costs, even if no further funding is appropriated.

Agency officials expressed concern that acquiring ECMs in smaller, useful segments would mean that some energy inefficient equipment would be kept in use longer than if acquired in bulk through the ESPCs. In addition, they noted that buying the ECMs in smaller quantities might cause the government to lose economies of scale achieved through the larger contracts. This concern was echoed by an ESCO representative, who pointed out that fixed costs for smaller contracts would be similar to those of larger projects. Nonetheless, given the higher financing and likely additional M&V expenses, agencies should formally assess the costs, on a present value basis, to determine the most cost-effective alternative.

Agencies Did Not Always Assess the Cost-Effectiveness of Partnership Arrangements

Three of the five partnership arrangements we reviewed were undertaken to obtain project financing.⁶⁸ Leading capital practices for capital decision-making would call for business case analyses in such cases, which include analyzing the full range of funding alternatives. However, for two of these three partnerships, agencies did not assess the full range of alternatives to determine how best to fund the project. For example, DOE officials could not provide evidence that the department had prepared or reviewed a business case analysis for the financing arrangement at ORNL. While ORNL's M&O contractor, UT-Battelle, LLC told DOE employees that private financing of three general-use office buildings was in the government's best interest, in our opinion the data provided to DOE were summarized at such a high level that DOE could not have done a comparative analysis of financing alternatives. Although UT-Battelle, LLC's detailed analysis was readily available to the department, UT-Battelle, LLC officials told us that data were not requested from nor provided to DOE. This analysis contained much greater detail, including an analysis of the cost of maintaining old, dilapidated buildings but did not analyze timely up-front appropriations as an alternative. DOE staff informed us that they had a good relationship with UT-Battelle, LLC and had no reason to doubt the summary analysis provided. However, a memorandum issued by DOE's Assistant General Counsel for General Law regarding the applicability of OMB Circular A-11 to the Oak Ridge National Laboratory land transfer proposal said that the department's policy would require DOE to do a comparative cost-analysis between using appropriated funds to build the facilities now and the cost of funding UT-Battelle, LLC's sublease payments.

⁶⁸Two of the five partnerships we reviewed were not done to obtain project financing. Rather, they were made in response to an opportunity to achieve other benefits. See summaries of VA's partnership arrangements at Mt. Home, Tennessee, and Vancouver, Washington, in appendix III for details.

VA did not compare the cost of financing the regional office building through up-front appropriations to the cost of financing it through Georgia's DeKalb County Development Authority. To avoid steep rent increases in GSA leased space and to collocate its regional office with an existing medical center, VA formed a partnership with the Authority to finance the construction of its new regional office building on VA-owned land. Although VA prepared a business case analysis comparing leasing from GSA to financing construction through the Authority, VA told us it did not compare the cost of financing through the Authority versus up-front appropriations.

One Partnership Led to Involvement in a Nonmission-Related Activity

VA has used partnership financing to engage in an activity that is not related to its mission and in which it ordinarily would not fund through full, up-front appropriations. In one instance VA used its EU lease authority to construct a power plant for its North Chicago campus. VA officials said that it is doubtful that VA would ever construct and operate a power plant on its own since (1) power generation is not a core activity within VA's mission and (2) VA does not possess the necessary expertise. However, according to VA officials, the Navy, the only provider of steam in the area, had been charging VA rates above those charged by other suppliers to consumers in neighboring areas of Chicago and this EU lease enabled VA to reduce its energy costs.

Conclusions

ESPCs and partnerships that we reviewed were authorized by Congress. The financing approaches used in many of the case studies were structured to include features for which OMB did not require up-front budget recognition even though they established long-term commitments of the government. One or more of the following features were used by case study agencies: (1) the transfer of government land to third parties, (2) use of a third-party rather than the U.S. Treasury to finance assets over time, (3) use of short-term leases for potentially long-term needs, (4) noncash transactions, (5) contractually guaranteed savings, and (6) statutory authority to enter into ESPCs without funds to obligate the full contract price. In the case studies we reviewed, the capital assets acquired offered benefits to the government such as energy conservation and a collocated VA regional office and medical center. It is not the purpose of this report to second guess the benefits of the assets. This report focuses only on the budgetary process of justifying the means of acquiring and financing assets. Even though project financing may be obtained more quickly by using

alternative financing mechanisms, these mechanisms do not disclose the federal government's measure of long-term obligations in the budget. As a result, when resource allocation decisions are made, costs are not shown on comparable bases. This can favor capital programs financed through these mechanisms over other programs (including capital) that include their full costs up front in the budget.

In our work on capital planning, we noted that leading practices include analyzing alternative approaches to financing capital by using methods, such as net present value analysis, to analyze relevant alternatives to address capital needs. OMB's capital planning guidance also suggests that agencies need to select the alternative with the most cost-effective results over the long term, based on a present value analysis. This analysis would include all relevant federal financing costs associated with the alternatives and any potential savings that can be attributed to the various alternatives.

Long-standing federal budget concepts and our own work reinforce the principle that full accountability for budgetary decisions is best guaranteed by recognizing the full costs of federal initiatives at the time when the decision is made to commit federal resources. One way to ensure that costs of assets used for long-term commitments are appropriately considered in the budget would be to score up front the expected payments over the same period of time used to analyze ownership options. This would require going beyond the strict terms of a proposed transaction and scoring based on the substance of the deal. Although ensuring the validity of agencies' long-term plans may pose implementation challenges, such as the need to validate agencies' long-term capital requirements, such scoring could result in a better reflection of the government's full commitment.

In addition to potentially affecting budget decisions, our case studies showed that funding capital projects through alternative financing mechanisms may be more expensive to the government than funding through appropriations because the private sector's cost of capital is generally higher than the federal government's. Other factors such as additional M&V and lower labor costs also may affect the cost of alternative financing. Using a proxy of their cost to the government, ECMs obtained through ESPCs we reviewed at the Navy and GSA cost between 8 and 56 percent more than the same ECMs funded through up-front appropriations. Also, agencies did not specifically analyze and compare all alternatives, nor did they investigate the feasibility of purchasing ECMs in useful segments. Given the federal government's ability to obtain capital at lower interest rates than private companies, officials at case study agencies

agreed that funding through timely, full, and up-front appropriations is less expensive than third-party financing. However, with respect to partnerships, other factors such as lower labor and fewer bureaucratic requirements may offset higher financing costs. Therefore, it is uncertain whether using partnerships is more or less expensive than using up-front financing. Agencies did not adjust their capital plans to accommodate needed capital investments nor request appropriations to finance capital projects because they did not believe sufficient appropriations would be available in a timely manner. Instead, they used the authorities provided to them to finance projects over time, through third parties. By incurring potentially higher costs in the future to avoid making difficult trade-offs today, agencies merely defer the trade-offs to a later date and a subsequent Congress. These trade-offs would lead Congress to either increase appropriations to maintain the current level of investment or fund fewer projects.

Agencies are faced with requirements for energy savings and need appropriations to implement energy conservation measures. At the same time, Congress is faced with allocating scarce resources for many needs across the government. Recently, Congress expressed its current priorities for energy saving projects by extending ESPC authority until October 1, 2006, to permit the financing of such projects through private companies over time. As shown in our report, this favorable budget treatment comes at a cost—a cost that Congress needs to monitor as these contracts are used during the next 2 years.

Implementation and monitoring of ESPCs is a relatively uniform process. Since partnerships take a variety of forms, their implementation and monitoring is more complex. While third-party financing can make it easier for agencies to quickly finance projects within a given amount of budget authority, it also presents monitoring challenges. In a federal setting, even the appearance of a problem such as a conflict of interest is of concern because it can erode the public's confidence in the government and ultimately degrade an agency's ability to carry out its mission. The use of third-party participants increases the importance of ensuring that the government's interests are protected and the performance of these third-party participants should be carefully monitored and verified.

Matter for Congressional Consideration

Given the competing pressures faced by Congress to support energy saving investments while at the same time seeking to ensure budgetary transparency of full program costs, Congress should consider requiring agencies that use ESPCs to present Congress with an annual analysis comparing the total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. Congress could use this information in evaluating whether to further extend ESPC authority beyond its current expiration date.

Recommendations for Executive Action

First, we recommend that the Director of OMB instruct agencies that use ESPCs to report to OMB and to their committees of jurisdiction an annual analysis comparing the total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. Congress could use this information in evaluating whether to further extend ESPC authority beyond its current expiration date.

Second, we recommend that the Director of OMB work with the scorekeepers to develop a scorekeeping rule for the acquisition of capital assets to ensure that the budget reflects the full commitment of the government for partnerships, considering the substance of all underlying agreements, when third-party financing is employed.

Finally, we recommend the Secretaries of Energy, VA, and the Navy and the GSA Administrator perform business case analyses and ensure that the full range of funding alternatives, including the technical feasibility of useful segments, are analyzed when making capital financing decisions.

Agency Comments and Our Response

In a draft of this report, we had a recommendation that the Director of OMB work with scorekeepers to develop a rule that would ensure that the full commitments of ESPCs are reflected in the budget. Several agencies did not agree with this recommendation, citing concerns that such a rule would likely discourage or prevent agencies from entering into ESPCs. In light of Congress' recent expression of its current priorities by extending ESPC authority through fiscal year 2006, we dropped this recommendation with respect to ESPCs and included instead the first recommendation to OMB and the matter for congressional consideration described above.

We obtained comments from OMB and our case study agencies—DOD, DOE, VA, and GSA. OMB agreed in concept with our second

recommendation that OMB work with scorekeepers to develop a rule for partnerships that would ensure the budget reflects the full commitment of the government, considering the substance of all underlying agreements. DOE and VA disagreed with this recommendation based on concerns that such a rule would effectively make alternative financing unavailable to federal agencies. While it is not our intent to discourage or eliminate partnerships with the private sector, recognizing the full commitment upfront in the budget enhances transparency and enables decision makers to make appropriate resource allocation choices among competing demands that all have their full costs recorded in the budget. GSA did not address this recommendation in its comments. DOE, GSA, and VA agreed at least in part with our final recommendation, that case study agencies should perform business case analyses to ensure the full range of funding alternatives are analyzed when making capital financing decisions. DOD disagreed with this recommendation and OMB did not address it in its comments. Business case analyses are well accepted as a leading practice among public and private entities and OMB requires all executive branch agencies to prepare such analyses for major investments as part of their budget submissions to OMB. Therefore, we believe our recommendation is appropriate.

Representatives from OMB, including staff from the Office of General Counsel, provided oral comments on our draft. These representatives stated that OMB “meets regularly with Congressional scorekeepers to review the scorekeeping rules and updates A-11 guidance in order to accurately reflect the types of transactions and obligations the government is entering into. OMB staff stated that they would take into consideration the findings of the report and the agencies’ comments on the report, including whether contractually guaranteed savings are equitably considered and given due credit when evaluating ESPCs. OMB staff also noted that recent updates in 2003 to scorekeeping guidance related to lease-backs from public/private partnerships may address some of the concerns GAO noted in the draft.” OMB staff said that the new scorekeeping guidance attempts to ensure that the substance of the entire transaction is scored. We have clarified in the report that OMB’s instructions were revised in 2003 and the possible effect on how case studies were scored.

With respect to ESPCs, OMB representatives said there is no current plan to revisit the 1998 decision to obligate funds on an annual basis. They said ESPCs are treated differently from partnerships in part because of the savings component and in part because they believe doing so would negate

the statutory authority provision permitting agencies to enter into a multiyear contract even if funds are available only to pay for the first year of the contract. We recognize the statutory authority enabling agencies to enter into ESPC multiyear contracts without funds available for the full contract price but note that the budget does not reflect full ESPC commitments as new obligations at the time that ESPCs are signed. In light of these circumstances and Congress' recent action to extend ESPC authority through fiscal year 2006, we removed our scorekeeping recommendation with respect to ESPCs and are now suggesting that Congress consider requiring agencies that use ESPCs to present Congress with an annual analysis comparing the total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. Congress could use this information in evaluating whether to further extend ESPC authority beyond its current expiration date.

DOD partially concurred with our recommendation (now deleted) about developing a new scorekeeping rule for ESPCs. In his letter, the Principal Assistant Deputy Under Secretary of Defense (Installations and Environment) said DOD would concur in full if the recommendation was modified to properly consider guaranteed savings. As we note in our report, recognizing the full commitment up-front in the budget when the commitment is made enables decision makers to make more informed resource allocation choices among competing demands from equally worthy projects that all have their full costs recorded in the budget. DOD stated that it did not concur with our recommendation that business case analyses should be performed when making capital financing decisions because such an analysis would only increase administrative costs to the department in the absence of a viable option to directly finance energy conservation projects. Business case analyses are well accepted as a leading practice among public and private entities and OMB requires all executive agencies to prepare a business case analysis for major investments as part of their budget submissions. Only by doing a business case analysis can the government ensure that it selects the best alternative and that taxpayers' interests are protected. Therefore, we believe our recommendation is valid. DOD also provided technical comments on the draft. DOD's complete comments and our responses are contained in appendix IV.

The Acting Under Secretary for Energy, Science and Environment agreed with our recommendation that agencies should perform business case analyses and we commend DOE for drafting a policy that will require a business case analysis for public/private partnerships. However, DOE

strongly disagreed with our recommendation on scoring ESPCs (now deleted) primarily because it believes it would negate the congressional objective of promoting energy conservation through the use of ESPCs. It is not the intent of this report to discourage or to eliminate energy conservation efforts. We do not believe that up-front funding would necessarily lead to reduced support as long as energy conservation was viewed as a priority within the appropriations process. However, recognizing the full commitment up front in the budget when the commitment is made enhances transparency and enables decision makers to make more informed resource allocation choices among competing demands that all have their full costs recorded in the budget. We believe our recommendation that OMB require and our suggestion that Congress consider requiring agencies to provide an annual analysis comparing total contract cycle costs of ESPCs with estimated up-front funding costs for the same ECMs would be an appropriate balance between budget transparency and energy savings at this time. DOE's complete comments and our responses are contained in appendix V.

Because GSA does not normally engage in public/private partnerships, its comments were confined to ESPCs. The GSA Administrator noted that GSA's policy is to perform business case analyses, but that such analyses do not always consider the full range of funding alternatives for ECMs. An official from GSA's Atlanta region noted that, given GSA's \$6 billion alterations and repair backlog, other financing alternatives may not be viable. GSA also said it has decided to revise its energy conservation project evaluation process to include consideration of useful segments. We commend GSA's decision to do so. Finally, GSA pointed out that, aside from ancillary up-front costs that must be incurred to carry out the project, ESCOs guarantee that project savings will be met or exceeded during the contract term and that GSA enforces these guarantees. Because these up-front payments are part of the costs in the delivery orders we reviewed, we included them in our analysis of total contract cycle costs—the payments ranged between 2 and 45 percent of the total contract cycle costs. For each of the three GSA ESPCs we reviewed, total contract cycle costs exceeded contract cycle savings. GSA's written comments and our complete response are contained in appendix VI.

VA disagreed with our report's conclusions and recommendation to OMB. Although our report only looked at VA partnerships, VA chose to comment both on partnerships and ESPCs. In the Secretary's comments, he noted that implementation of the recommendation to develop a new scorekeeping rule would limit, discourage, and possibly eliminate the

enhanced-use lease program, thus resulting in a loss of benefits and services to veterans. Again, it is not the intent of this report to discourage or to eliminate energy conservation efforts or partnerships with the private sector. However, from a budgetary standpoint, recognizing the full commitment up front in the budget when the commitment is made enables decision makers to make more informed resource allocation choices among competing demands. With respect to our second recommendation regarding the need for business case analyses, VA noted that it had a process for this to occur for capital investments above a threshold amount. VA's complete comments and our responses are contained in appendix VII.

As agreed with your office, unless you release this report earlier, we will not distribute it until 30 days from the date of the letter. At that time, we will send copies of this report to the Ranking Minority Member of the Senate Committee on the Budget and the Chairman and Ranking Minority Member of the House Committee on the Budget. We will also send copies to the Chairmen and Ranking Minority Members of the House and Senate Appropriations Committees, House and Senate Veterans Committees, and House and Senate Energy Committees. In addition, we are sending copies to the Secretaries of Defense, Energy, and Veterans Affairs as well as the Administrator of the General Services Administration and the Director of the Office of Management and Budget. Copies will also be made available to others upon request. In addition, the report is available at no charge on GAO's Web site at <http://www.gao.gov>.

This report was prepared under the direction of Susan J. Irving, Director, Federal Budget Analysis, Strategic Issues, who can be reached at (202) 512-9142 or irvings@gao.gov and Mark L. Goldstein, Director, Physical Infrastructure Issues, who can be reached at (202) 512-6670, goldsteinm@gao.gov. Questions may also be directed to Christine Bonham, Assistant Director, Strategic Issues, at (202) 512-9576 or bonhamc@gao.gov. Other key contributors to this report are listed in appendix VIII.

Sincerely yours,



Susan J. Irving
Director, Federal Budget Analysis
Strategic Issues



Mark L. Goldstein
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Objectives, Scope, and Methodology

The objectives of this study were to determine (1) what specific attributes of energy savings performance contracts (ESPC) and public/private partnerships (partnerships) contributed to budget scoring decisions, (2) the costs of financing through ESPCs and partnerships compared to the costs of financing via timely, full, and up-front appropriations, and (3) how ESPCs and partnerships are implemented and monitored. To obtain the detail necessary to respond to this request, we used a case study approach. Accordingly, our findings cannot be used to generalize across the government. We selected case study agencies based on our August 2003 report on alternative approaches to finance capital.¹ In total, we analyzed 11 case studies—6 ESPCs and 5 partnerships—across 4 agencies.

For ESPCs, we selected case studies at the General Services Administration (GSA) and the Department of the Navy (Navy). We chose these two agencies because they had awarded the largest dollar volume of delivery orders under the Department of Energy's (DOE) super ESPC program.² In addition, our discussions with DOE's Federal Energy Management Program (FEMP) officials, who administer the Super ESPC program, indicated that the differences in the way GSA and the Navy administer ESPCs (decentralized versus centralized, respectively) might provide some interesting insights. Finally, the Committee's request specifically asked us to include a military department in our review of ESPCs.

For partnerships, we selected case studies at the Departments of Veterans Affairs (VA) and Energy. We chose VA because of its broad authority to enter into enhanced use (EU) lease partnerships and the significant number of EU leases that have been awarded. We selected one case from DOE based on the preliminary work on the Oak Ridge National Laboratory

¹Our August 2003 report identified alternative financing approaches based on prior GAO reports and more current research. See GAO, *Budget Issues: Alternative Approaches to Finance Federal Capital*, GAO-03-1011 (Washington, D.C.: Aug. 21, 2003). While that work was not intended to result in a comprehensive list of all capital financing approaches, we believe we identified the major approaches used.

²An ESPC is a contracting method that allows a contractor to incur the cost of implementing energy saving measures at federal facilities with the agency repaying the contractor over time using the resulting savings in utility costs. To streamline the procurement process, FEMP awarded indefinite-delivery, indefinite-quantity (IDIQ) contracts—Super ESPCs—to a number of energy service companies (ESCO). With these umbrella contracts in place, federal agencies can place and implement delivery orders against the contracts in a fraction of the time it takes to develop a stand-alone ESPC. Many delivery orders have been written against ESPCs established by other agencies, such as the Army Corps of Engineers.

(ORNL) partnership done for our August 2003 report. Also, it was our understanding that this type of transaction might be replicated at other DOE facilities.

The initial selection of case studies within each agency was based on (1) project costs, (2) availability/location of data, and (3) time frame of the project. These criteria narrowed the number of available case studies and we judgmentally selected cases from this pool. We chose three ESPC projects each from GSA and the Navy. Also, we chose to review one partnership case study from DOE and four from VA. Table 2 lists the case studies reviewed at each agency.

Table 2: Case Studies Included in This Review

Agency	ESPCs	Partnerships
Navy	<ul style="list-style-type: none"> • Navy Region Southwest, Calif. • Patuxent River Naval Station, Md. • Naval Submarine Base, Bangor, Wash. 	
GSA	<ul style="list-style-type: none"> • Gulfport Federal Courthouse, Miss. • North Carolina Bundled Sites • Atlanta Bundled Sites, Ga. 	
VA		<ul style="list-style-type: none"> • Atlanta Regional Office Collocation, Ga. • Vancouver Single Room Occupancy, Wash. • Medical Campus at Mountain Home, Tenn. • North Chicago, Energy Center, Ill.
DOE		<ul style="list-style-type: none"> • Oak Ridge National Laboratory, Tenn.

Source: GAO.

Case studies were selected based on their cost and data availability. Data for the selected cases were in Washington, D.C., for VA cases; Atlanta, Georgia, for GSA cases; Port Hueneme, California, for Navy cases; and Oak Ridge, Tennessee, for the DOE case study. We selected ESPCs for which contracts/delivery orders were awarded no later than fiscal year 2001 so that the respective agencies would have had opportunities to analyze whether cost savings realized to date approximate expected savings.

To understand the features of the selected ESPCs and partnerships, we reviewed laws authorizing the agencies to enter into ESPCs and partnerships, relevant GAO products, and ESPC files and partnership agreements. We interviewed officials and/or staff from the Office of Management and Budget (OMB) and agencies involved in the development of the selected ESPCs and partnerships. We interviewed officials from FEMP in order to understand the general features of ESPCs. In addition, we met with officers of UT-Battelle, LLC—ORNL's management and operations (M&O) contractor—to gain a better appreciation of the DOE partnership.

To gain an understanding of how the selected ESPCs and partnerships were scored and the reasoning behind the scoring, we reviewed relevant portions of OMB's Circular A-11, analyzed the terms and conditions of the selected case studies relative to the budget scoring rules, reviewed relevant Congressional Budget Office (CBO) scoring reports, and met with agency, CBO, and OMB officials and staff. All of the partnership case studies we reviewed were executed before OMB's 2003 changes to its instructions on the budgetary treatment of lease-purchases and leases of capital assets. According to OMB staff, some of these partnerships may have been scored differently under the revised instructions.

To analyze ESPC costs, we reviewed the final delivery orders of each of our six ESPC case studies.³ Cash flow schedules associated with these delivery orders specified the case studies' expected savings and costs, such as principal payments, interest payments, measurement and verification (M&V) fees, operations and maintenance (O&M) fees, and energy service company (ESCO) mark-ups. Using these documents, we identified costs, on a present value (PV) basis (using A-94 guidance), that agencies would not necessarily have incurred had they financed the asset acquisition through timely, full, and up-front appropriations instead of ESPCs. Although we had planned to perform a similar cost analysis of our partnership case studies, we were unable to do so because comparable data were not available.

To allow us to describe how ESPCs and partnerships are implemented and monitored, we met with OMB, GSA, VA, Department of Defense (DOD),

³We did not include modifications added to ESPCs after the delivery orders were signed because we were most interested in decisions made at the point the government's commitment was established.

and FEMP officials and staff. We also spoke with representatives of certain ESCOs to help us understand how agencies negotiate and monitor ESPC contracts. Finally, we reviewed agencies' documentation of how ESPC baselines were estimated and how actual savings would be determined.

Written comments from DOD, DOE, GSA, and VA are included and addressed in appendixes IV through VII. OMB provided oral comments. We have incorporated changes as a result of these comments throughout, as appropriate.

Our work was done in accordance with generally accepted government auditing standards, from September 2003 through November 2004, in Washington, D.C., Atlanta, Ga., Oak Ridge, Tenn., and Port Hueneme, Calif.

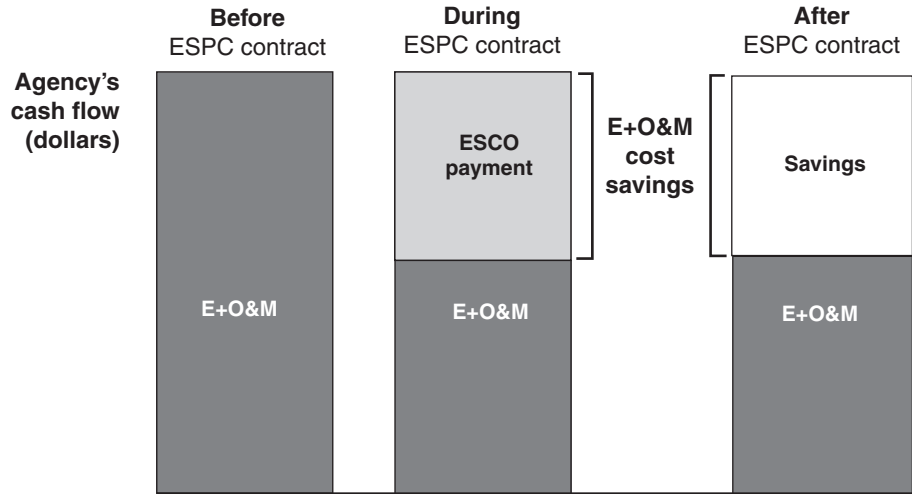
ESPC Case Studies

The Energy Policy Act of 1992 and Executive Order 13123 require federal agencies to reduce their consumption of energy in federal buildings. The act set a goal for the agencies of lowering their consumption per gross square foot by fiscal year 2000 to a level 20 percent below fiscal year 1985 baseline consumption levels.¹ Executive Order 13123 requires a 30 percent reduction from 1985 levels by the year 2005 and a 35 percent reduction by 2010. ESPCs allow federal agencies to acquire energy conservation measures (ECM) to meet these goals and implement energy-efficiency projects without having to request the full amount of appropriations from the federal budget.² Under an ESPC, the ESCOs assume much of the up-front capital costs associated with the improvements. The government then uses a portion of annual energy-related cost savings attributable to the improvements to repay the ESCO for its investment over time, which may be as long as 25 years. This means that, although the government's energy use may drop immediately, its expenses are generally not significantly reduced until after the ESPC is paid off (see fig. 8). The ESCOs guarantee the performance of the equipment, within certain parameters, for the term of the ESPC. Agencies frequently acquire multiple or "bundled" ECMs through ESPCs so that ECMs yielding more dollar savings can subsidize those yielding less savings.

¹42 U.S.C. § 8253(a)(1).

²42 U.S.C. § 8287 (a)(2)(D)(ii).

Figure 8: ESPCs Reallocate the Federal Government’s Payments for Energy and Energy-Related Operations & Maintenance Expenses (E+O&M)



Source: Federal Energy Management Program, adapted by GAO.

Note: The proportion of E+O&M cost savings depicted may be more or less depending on the ECMs installed and the terms of the contract.

Within DOE, the FEMP provides assistance to agencies seeking project financing through a number of methods, such as ESPCs. According to FEMP guidance, energy-related savings result from reduced energy use, improved patterns of energy use, avoided renovation, and reduced operations, maintenance, and repair costs. Thus, if agencies can avoid scheduled renovations or maintenance of older equipment by implementing ESPCs, they may use those avoided costs to “buy-down” the ESPCs.³

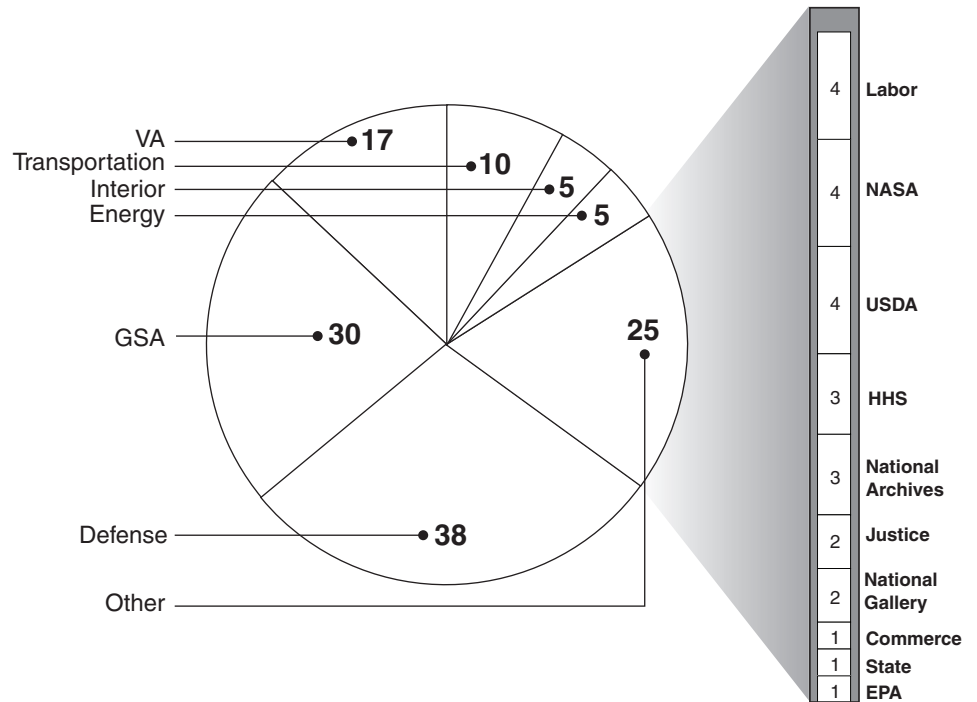
³Although FEMP’s guidance does not include the term “buy-down,” it is a term used within the industry and agencies. In this report, buy-downs include prepayments of principal, typically resulting from avoided renovation or maintenance of older equipment.

To streamline the procurement process, agencies have awarded multiple-award, indefinite-delivery-indefinite quantity (IDIQ) contracts to a number of ESCOs in different regions of the country. With these multiple-award contracts in place, federal agencies can place and implement delivery orders⁴ against the contracts in a fraction of the time it takes to develop a stand-alone ESPC because the competitive selection process has already been completed and key terms of the contract, such as maximum markup ceilings,⁵ have already been negotiated. FEMP's IDIQ contract, known as a super ESPC, is used by many agencies. Figure 9 shows the distribution of agencies using FEMP's super ESPC from fiscal years 1998 through 2003. The bar on the right of the figure shows in more detail the 25 awards at other agencies using FEMP's super ESPCs.

⁴Delivery order is a term used by FEMP in its ESPC IDIQ contracts. It is used for agencies ordering ESPC services under FEMP IDIQ contracts and is interchangeable with the term task order, used for agencies ordering services under DOD IDIQ contracts. The Federal Acquisition Regulation (FAR) defines delivery order as "an order for supplies placed against an established contract or with Government sources." Originally, FEMP contracting officers considered this to be the best definition for an ESPC, so it was adopted as the term used in the IDIQ.

⁵ESPC markup ceilings were established on a competitive basis by FEMP. Markups average about 29 percent and include overhead, benefits, sales, legal expenses, and profit.

Figure 9: Number of FEMP Super ESPC Awards by Agency, Fiscal Years 1998–2003

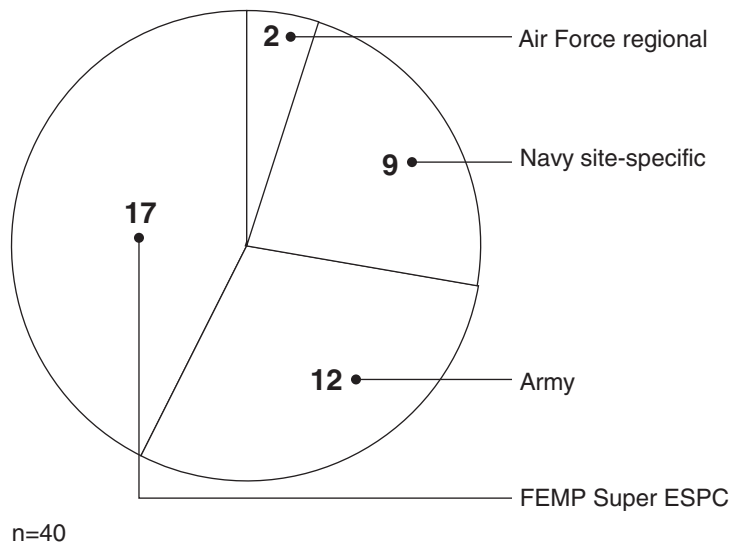


n=130

Source: Federal Energy Management Program.

GSA generally writes delivery orders against FEMP's super ESPC, while the Navy writes delivery orders against a variety of IDIQ contracts, referred to as contracting vehicles. Figure 10 shows the distribution of Navy ESPC awards by contract vehicle from fiscal years 1998 through 2003.

Figure 10: Number of Navy ESPC Awards by Contract Vehicle, Fiscal Years 1998–2003



Source: Naval Facilities Engineering Command.

FEMP has issued guidelines and offered training and other support to help agencies use its Super ESPC. A typical suite of FEMP services, costing an estimated \$30,000, includes, but is not limited to, a review of the ESCO submittals and advice on:

- detailed energy surveys (DES)⁶ and related energy baseline data;
- appropriateness of (M&V)⁷ plan for proposed ECMs;
- technical and economic feasibility of proposed ECMs;
- pricing and financing of ECMs and post-installation services submitted in price schedules;

⁶The detailed energy survey is the ESCO's comprehensive audit of facilities and energy systems at the project site. It augments, refines, and updates the preliminary site survey data and provides the information needed to update the feasibility analyses of the various ECMs under consideration for the project.

⁷Measurement and verification is the process by which ESCOs determine that equipment is performing as guaranteed.

- issues to address during agency/ESCO negotiations;
- commissioning and postinstallation M&V reports and advice on project acceptance; and
- annual M&V reports to verify annual energy savings or issues to resolve before resuming payments.

GSA sometimes uses FEMP's services. Because the Navy has a centralized technical and contracting team that is familiar with ESPCs, it uses its own staff rather than FEMP's contracting officers and facilitators to support projects. However, the Navy has used some FEMP's services, such as reviews of initial project proposals, free of charge, and has purchased other FEMP support in special circumstances.

The process for selecting and implementing ESPCs varies among agencies. GSA and the Navy generally delegate the decision of whether to finance ECMs through full, up-front appropriations or ESPCs to regional coordinators and installations' commanding officers, respectively. Once the decision to use an ESPC has been made, GSA and the Navy build support and consensus for the project inside the agency. FEMP guidance also suggests agencies meet informally with prequalified ESCOs before selecting an ESCO for the contract. The Navy may invite vendors to participate in oral presentations covering a range of topics, including their qualifications and past performance with ECMs as well as their technical approach for projects. Based on these presentations, the local facility makes its selection.⁸

After the contractor has been selected, the project team schedules an initial meeting, referred to as a "kick-off" meeting, to discuss, among other things, the scope of an initial energy survey, payback terms and restrictions, O&M requirements, M&V approaches, and site-specific information. The contractor then performs a preliminary site survey, based on a building walk-through and spot metering as well as an analysis of various data, such as utility rate structure and energy consumption statistics.⁹ Upon completion of the energy audit, the contractor submits an initial proposal

⁸The Defense Federal Acquisition Regulation requires that the contracting officer provide all preapproved contractors a fair opportunity to compete for the contract. See 48 CFR § 216.505-70.

⁹Energy consumption statistics are measured in British thermal units (BTU).

that includes a summary of ECMs investigated and cost and savings estimates. Based on a review of this initial proposal, the agency decides whether or not to proceed with the ESPC. If it decides to go forward, the agency transmits a letter confirming its intention to award the delivery order to the ESCO (the Notice of Intent to Award) and issues a delivery order request for proposal. It is only after the agency issues the Notice of Intent to Award that the ESCO's expenses may be recoverable from the government.

The contractor then performs a DES and submits a report that is the basis for the project's contractually guaranteed savings, M&V, and O&M. The DES is the ESCO's comprehensive audit of facilities and energy systems at the project site. The DES augments, refines, and updates the preliminary site survey data and provides the information needed to update the feasibility analyses of the various ECMs under consideration for the project. The agency's project team reviews the proposal and submits its comments to the ESCO. Based upon these comments, the ESCO develops a final energy project proposal. For projects with a cancellation ceiling in excess of \$10 million, the agency must notify Congress of the project no later than 30 days before the task order award.¹⁰ After the agency approves the project and negotiates the price or determines the price to be fair and reasonable, the project is awarded.

¹⁰42 U.S.C. § 8287 (a)(2)(D)(iii). Prior to the enactment of the Energy Act of 2000 (Pub. L. No. 106-469), the cancellation ceiling threshold was \$750,000.

During the project execution phase, the contractor completes the project design and then installs the ECMs. Title of the equipment and systems built or installed under the delivery order is transferred from the ESCO to the agency at the time of delivery order award, installation, or contract closeout.¹¹ ESPCs do not involve change orders¹² since contractors guarantee certain levels of performance and are obligated to make changes necessary to achieve those levels at their own expense. However, the agency and the contractor may modify the delivery order to, for example, authorize the installation of additional ECMs. Once the project has been successfully completed and accepted by the government, payments begin. Contractors are required to guarantee equipment performance; therefore, some level of M&V¹³ is required to ensure guaranteed performance is realized. M&V is performed by the ESCO that installs the equipment. The level of M&V is negotiated between the government and the contractor and must be specified in the signed delivery order. Agency officials said that the type of M&V employed depends on the interaction of various factors, including climate, the people using the facilities, the facilities' mission, and the operation of the equipment. The contractor may also perform the O&M for the ESPC-installed equipment. Facilities with in-house expertise may take on these responsibilities themselves. As part of the DES, the ESCO and agency negotiate a responsibility matrix specifying the O&M duties to be performed by each party. FEMP guidance calls for negotiating a responsibility matrix across a comprehensive set of issues, O&M duties being only one.

¹¹According to FEMP officials, most agencies transfer title at the acceptance of the installation and the postinstallation M&V report, after confirmation of the guaranteed savings.

¹²Change orders involve alterations to the design of an individual ECM.

¹³FEMP has issued M&V guidance to agencies.

During the term of the contract, an ECM's energy cost savings are used to pay the ESCO. If annual savings resulting from the ESPC exceed annual contractor payments, agencies other than the DOD and GSA may retain 50 percent of this excess; the other 50 percent must be returned to Treasury.¹⁴ GSA may deposit all of the excess savings in the Federal Buildings Fund. As of fiscal year 2004, the Navy may retain 100 percent of its excess funds, a change from the previous requirement to return one third of the excess savings to Treasury while retaining the other two thirds.¹⁵ The Navy is required to use one half of the retained savings for energy reduction projects or water conservation activities and the other half for Navy welfare, morale, and recreation projects, among other things. An official responsible for the Navy's Shore Energy program said that, prior to 2004, the Navy had not returned funds to Treasury since, to their knowledge, there were no cases in which actual ESPC savings exceeded those guaranteed by the contractor. However, according to other Navy officials, the Navy's Comptroller has not issued guidance on the return of savings to Treasury. Because the Navy does not maintain a central system to track savings, it would be difficult to determine whether the actual savings generated by an ESPC have ever exceeded guaranteed savings. In other words, the Navy does not know if it should have paid some portion of its energy savings to Treasury.

Implementing M&V strategies is required for ESPCs to verify the achievement of guaranteed energy cost savings each year. According to FEMP, M&V involves three major steps: baseline definition, postinstallation verification, and regular-interval verification. Annual M&V only needs to show that the overall savings guarantee has been met, not determine actual savings for each ECM.

M&V methodologies are grouped into four categories and may vary depending on the ECM installed. When choosing among M&V methodologies, agencies must balance the accuracy of their energy savings estimates with the costs of verifying those estimates. For example, where the performance of the installed equipment is relatively certain, as is the case for lighting retrofits, it may not be cost effective to measure actual energy use throughout the term of the contract. In this case,

¹⁴42 U.S.C. § 8256(c)(5)(A).

¹⁵40 U.S.C. § 592(f) and 10 U.S.C. § 2865(b) authorize GSA and the Navy, respectively, to retain excess savings.

postinstallation and baseline energy use is estimated using engineering calculations or system models. As long as the potential to perform is verified, the savings are as originally claimed and do not vary over the contract term. Alternatively, for projects with large elements of uncertainty, such as chillers and chiller plants, contractors might continually measure the energy use of equipment throughout the contract. Continuous monitoring may greatly reduce uncertainty that savings are actually being achieved, but will also cost more than less rigorous methods of M&V.

M&V strategies allocate risk between the ESCO and the agency in advance. Both ESCOs and agencies are reluctant to assume responsibility for factors they cannot control. For example, the ESCO generally does not assume responsibility for risk related to operational factors, such as weather, how many hours the equipment is used, and maintenance practices. Alternatively, the agency typically does not assume the responsibility for risk associated with equipment performance since the ESCO selects, designs, and installs the equipment.

If the actual annual savings are less than the annual guaranteed savings amount, the ESCO must correct or resolve the situation or negotiate a change in the contract. For two ESPCs, an annual M&V report identified performance problems with installed ECMs. In these cases, the ESCOs resolved the performance problems by either replacing or installing new equipment. Even without the ESPC's guarantee, the manufacturer's warranty would have indemnified the government in at least one of these cases. However, according to Navy officials, without the M&V process of ESPC, the equipment deficiencies might have gone unnoticed during the equipment warranty period.

The rest of this appendix contains summaries of our six case studies from GSA and the Navy. Following is a list of these ESPCs.

Navy

- Navy Region Southwest, California
- Patuxent River Naval Station, Maryland
- Naval Submarine Base Bangor, Washington

GSA

- Gulfport Federal Courthouse, Mississippi
- North Carolina bundled sites
- Atlanta bundled sites, Georgia

For each case study, we describe the contract terms and status, the ECMs acquired, ancillary benefits according to the contractor, and any implementation/monitoring issues identified in M&V reports. We also include a table showing our cost analysis of the ESPC.

**Navy Region
Southwest, California**

The primary contractor for the ESPC for the Navy Region Southwest, California, was NORESKO, ERI Services Division. The delivery order for the contract was awarded on September 26, 2001, and specified that title to all equipment installed by the contractor would be transferred to the government upon project acceptance. As of December 18, 2003, all ECMs had been physically installed and accepted by the government and were operating and yielding savings. NORESKO and the Navy share responsibility for the proper O&M of ECMs installed under this delivery order.

According to the final delivery order, the Navy Region Southwest ESPC consists of five ECMs:¹⁶ microturbine, heat recovery, and variable frequency drives; an irrigation systems upgrade; a compressed air systems upgrade; heating, ventilating and air conditioning systems improvements; and a solar photovoltaic system.

In addition to reductions in energy use and operating costs, NORESKO claimed the ESPC provided the following ancillary benefits:

- A world-class solar photovoltaic system that was, at one time, the largest photovoltaic installation in the United States and the largest covered parking solar photovoltaic system in the world. This covered parking also allows sailors to leave their cars in a protected environment while at sea (see fig. 11).

¹⁶After the delivery order was signed in 2001, a number of modifications were made to the contract that expanded the total scope of work. For example, a sixth ECM was added in October 2002 to install a Compressed Air System Upgrade at the Naval Station in San Diego.

- A demonstration project for the Navy to determine the environmental benefits of microturbine technology.

Figure 11: Covered Parking Photovoltaic System at Navy Region Southwest, California



Source: Department of the Navy.

The term of the contract is 10 years, with an interest rate of 9.32 percent. As shown in table 3, the PV cost of the ECMs financed through an ESPC is approximately \$14.7 million, approximately \$1 million more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$6.8 million less than the PV of the ESPC's total contract cycle costs, including O&M payments. However, according to Navy officials, over the life of the equipment, the projected cost savings will exceed the projected costs. Navy Region Southwest used the \$6.9 million in special energy project funds it received from the Office of the Secretary of Defense (OSD) and the Navy to buy down the project's principal balance upon acceptance. The OSD funds were appropriated to help offset the cost

of energy projects in California, in an effort to address the energy supply shortages in the state.

The ECMs under this delivery order were installed and accepted over a number of months, with final acceptance of all ECMs in December 2003. An initial M&V report issued in March 2004 provided a baseline to ensure that all installed ECMs were performing as guaranteed. The initial verification process did not reveal any major maintenance or operational issues that would negatively affect performance. Verified savings through the end of the first year amounted to roughly \$1.4 million, which exceeded the savings guaranteed in the delivery order.¹⁷

Table 3: Cost Analysis of Navy Region Southwest ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations^a	Cost of ECMs financed through ESPCs^b
Installation cost	\$13.66	\$11.92 ^c
Interest payments @ 9.32%	N/A	\$2.54
M&V payments	N/A	\$0.23
Total	\$13.66	\$14.69
	Difference:	\$1.03

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

¹⁷These savings were realized in fiscal year 2004. As of fiscal year 2004, the Navy was not required to return excess savings to Treasury.

Patuxent River Naval Air Station, Maryland

The prime contractor for the ESPC for Patuxent River Naval Air Station was Energy Assets; the prime subcontractor was Co Energy Group. The delivery order for the contract was awarded on September 28, 2000, and specified that title to all equipment installed by the contractor would be transferred to the government upon project acceptance. As of April 10, 2002, all ECMs had been physically installed, were operating, and were yielding energy savings.

The Patuxent River ESPC consists of three ECMs: ground source heat pump (GSHP) installation at nine buildings; process cooling water system modification at one building; and lighting efficiency improvements at seven buildings.

In addition to energy savings and capital improvements, Energy Assets claimed the ESPC provided ancillary benefits:

- There was enhanced personnel safety and landscape aesthetics in the station's Logistic Industrial Complex. Prior to the ESPC, steam distribution piping leaks created a safety hazard and were an eyesore.
- There was environmental compliance for one building at the station. Prior to the ESPC, a cooling water system at the building was configured to discharge chlorinated water into the Chesapeake Bay.

The term of the contract is 20 years, with an interest rate of 9 percent. As shown in table 4, the PV cost of the ECMs financed through an ESPC is approximately \$5.8 million, approximately \$1.4 more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$1.9 million less than the PV of the ESPC's total contract cycle costs, including O&M payments. However, according to Navy officials, over the life of the equipment, the projected cost savings will exceed the projected costs. To reduce financing costs, the Navy made a \$2.3 million down payment on the project after awarding the delivery order. According to Navy officials this down payment was equivalent to the sum of one-time avoided costs resulting from the project, such as avoiding environment-related upgrades to existing cooling water systems.

According to the postimplementation and first annual monitoring and verification reports issued by the contractor in August of 2002 and December of 2003, respectively, all ECMs were operational and performing

as expected. Although energy savings goals were met in the first year, one ECM did not perform according to the performance requirements of the contract. During the summer of 2002, it was reported that a process cooling water system installed under the ESPC did not meet the demands of Navy laboratory test equipment. The Navy and the contractor agreed that the resolution of the problem was the responsibility of the contractor and that the contractor would not, at any time, bill the government for costs incurred to resolve the problem.

Table 4: Cost Analysis of Patuxent River Naval Air Station ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations ^a	Cost of ECMs financed through ESPCs ^b
Installation cost	\$4.33	\$3.11 ^c
Interest payments @ 9.00%	N/A	\$2.44
M&V payments	N/A	\$0.22
Total	\$4.33	\$5.77
	Difference:	\$1.44

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

Naval Submarine Base, Bangor, Washington

The prime contractor for the ESPC at the Bangor Submarine Base in Washington was Johnson Controls. The delivery order for the contract was issued on September 27, 2001. As of March 1, 2003, all ECMs had been installed, were operating, and were yielding savings. Upon government acceptance of the completed project, title to the equipment installed under the ESPC was transferred to the government.

Six ECMs were installed at the Bangor Submarine Base, including chiller plant modifications, air handling unit modifications, chilled water supply and pumping modifications, and lighting modifications for various buildings.

The term of the contract is 9 years, with an interest rate of 7.44 percent. As shown in table 5, the PV cost of the ECMs financed through an ESPC is approximately \$5.34 million, approximately \$1 million more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$1.3 million less than the PV of the ESPC's total contract cycle costs, including O&M payments. However, according to a Navy official, over the life of the equipment, the projected cost savings will exceed the projected costs. The Navy was authorized by the Office of the Secretary of Defense (OSD) to use a fiscal year 2001 supplemental appropriation for the western power grid crisis to make an up-front payment of roughly \$1 million to reduce ESPC-related financed costs. The government also made a roughly \$214,000 up-front payment using savings generated during the construction period.

According to the postimplementation report issued by the ESCO, the projected cost savings for the first year of the project were roughly \$752,000, exceeding the ESCO's savings guarantee of about \$634,000.¹⁸ These projected cost savings include about \$734,000 from reduced energy consumption and about \$17,000 from avoided O&M costs.

¹⁸These excess savings were realized in fiscal year 2004. Accordingly, the Navy may retain these "excess" savings.

Table 5: Cost Analysis of Naval Submarine Base, Bangor ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations ^a	Cost of ECMs financed through ESPCs ^b
Installation cost	\$4.33	\$3.53 ^c
Interest payments @ 7.44%	N/A	\$1.40
M&V payments	N/A	\$0.41
Total	\$4.33	\$5.34
	Difference:	\$1.01

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

GSA Gulfport Federal Courthouse, Mississippi

The prime contractor for the ESPC at GSA's Federal Courthouse in Gulfport, Mississippi, was Sempra Energy Services. Unlike our other ESPC case studies, the Gulfport ESPC did not retrofit existing systems but installed ECMs in new construction. GSA's Office of General Counsel determined that using ESPCs to finance ECMs was appropriate for the costs of improvements over the "baseline" design (e.g., the difference in cost between a standard chiller and a highly efficient chiller) rather than the entire cost of the improved system. The delivery order for the contract was awarded on September 28, 2001. As of September 19, 2003, all ECMs had been physically installed and were operating and had the potential to deliver the guaranteed annual savings as reflected in the ESPC delivery order.

According to the final delivery order, the ESPC for the Gulfport Federal Courthouse consists of 14 ECMs, including variable frequency drives for

chilled water pumps and hot water pumps, lighting controls, energy efficient chillers, and occupancy controlled ventilation.

The term of the contract is 17 years, with an interest rate of 8.4 percent. As shown in table 6, the PV cost of the ECMs financed through an ESPC is approximately \$2.5 million, approximately \$0.9 million more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$90,000 less than the PV of the ESPC's total contract cycle costs, including O&M payments. However, according to GSA officials, over the life of the equipment, the projected cost savings will exceed the projected costs. The government also made an \$88,000 up-front payment to cover certain O&M expenses.

Since GSA installed ECMs in new construction, there was no historical baseline to which the performance of the Gulfport Federal Courthouse equipment could be compared. Thus, GSA hired a consulting firm to model a conceptual building and, from that model, determined baseline energy consumption for the new building with less efficient equipment. The first annual M&V report for the project was issued in December 2004, after we had completed our analysis.

Table 6: Cost Analysis of Gulfport Federal Courthouse ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations ^a	Cost of ECMs financed through ESPCs ^b
Installation cost	\$1.60	\$0.64 ^c
Interest payments @ 8.4%	N/A	\$1.78
M&V payments	N/A	\$0.08
Total	\$1.60	\$2.50
	Difference:	\$0.90

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

GSA North Carolina Bundled Sites

GSA awarded the ESPC for multiple GSA-owned buildings in North Carolina, the Greensboro IRS Building, the Greensboro Federal Courthouse, the Raleigh Federal Building and Courthouse, the Winston-Salem Federal Building and Courthouse, and the Wilmington Federal Building to DukeSolutions (now AmerescoSolutions). The delivery order for the contract was awarded on September 27, 2000. As of November 2001, GSA found the work performed under the ESPC to be sufficiently complete.

According to the September 20, 2000, contract, the ESPC involved multifaceted ECMs for multiple federal buildings within North Carolina. The 10 ECMs include lighting retrofits, the installation of energy management systems, replacement of motors for mechanical equipment and air flow fans, and replacement of chillers.

The term of the contract is 19 years, with an interest rate of 8.59 percent. As shown in table 7, the PV cost of the ECMs financed through an ESPC is

approximately \$1.93 million, approximately \$0.54 million more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$1.1 million less than the PV of the ESPC's total contract cycle costs, including O&M payments. However, according to GSA officials, over the life of the equipment, the projected cost savings will exceed the projected costs. As part of the \$3.1 million contract cycle costs, GSA made a \$1.2 million up-front payment. These funds had already been appropriated for energy efficiency improvements to GSA buildings involved in the project. However, the improvements became unnecessary after GSA accepted the ESPC.

According to the M&V report issued in April 2003, all ECMs were operating and would continue to operate as intended.

Table 7: Cost Analysis of North Carolina Bundled Sites' ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations ^a	Cost of ECMs financed through ESPCs ^b
Installation cost	\$1.39	\$0.57 ^c
Interest payments @ 8.59%	N/A	\$1.25
M&V payments	N/A	\$0.11
Total	\$1.39	\$1.93
	Difference:	\$0.54

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

GSA Atlanta Bundled Sites, Georgia

GSA awarded an ESPC for multiple sites in Atlanta, Georgia, including the Richard B. Russell, Peachtree Summit, and Court of Appeals buildings, to NORESKO (formerly ERI Services, Inc.). The delivery order for the GSA Atlanta “bundled sites” was awarded on September 30, 1999, and as of May 31, 2000, all ECMs had been installed, were operating, and were yielding energy savings. Upon acceptance of the project, GSA took title to all equipment, and NORESKO will be responsible for maintenance and repair services for all ECMs.

The Atlanta bundled sites ESPC consists of five ECMs: energy efficient lighting upgrades, variable frequency drives, two chiller plant upgrades, and outside air reduction. The term of the contract is 20 years, with an interest rate of 8.50 percent. As shown in table 8, the PV cost of the ECMs financed through an ESPC is approximately \$7.8 million, approximately \$1.6 million more than the estimated cost of the ECMs financed through timely, full, and up-front appropriations. The PV guaranteed cost savings specified in the delivery order was about \$500,000 less than the PV of the ESPC’s total contract cycle costs, including O&M payments. However, according to GSA officials, over the life of the equipment, the projected cost savings will exceed the projected costs. A one-time energy-related operations and maintenance payment in the amount of \$900,000 was paid upon completion and acceptance of all ECMs. The \$900,000 represented funds that had already been appropriated to replace a chiller for one of the buildings involved in the project.

NORESKO submitted annual verification reports for the first 3 years of the project. Based on postinstallation and annual M&V activities, project savings were verified and exceeded the guaranteed actual savings by approximately 5 percent in years 1 and 2, and 1.6 percent for year 3 of the contract.

Three of the ECMs installed under the ESPC experienced problems at one point during the first 3 years of the contract. According to the M&V reports, the contractor worked with GSA Atlanta to resolve two of these problems. However, absent the ESPC’s guarantee, it may be that the manufacturer’s warranty would have covered the problems. The contractor determined that the third problem was part of a larger issue and, consequently, was outside of the scope of the ESPC. According to a GSA official, GSA does not always receive the savings guaranteed by the ESCO. When actual savings fall below the guaranteed level, the ESCOs might

claim that they are not at fault and, consequently, are not financially responsible.

Table 8: Cost Analysis of Atlanta Bundled Sites' ESPC

Dollars in millions, present value

	Cost of ECMs financed through timely, full, and up-front appropriations^a	Cost of ECMs financed through ESPCs^b
Installation cost	\$6.15	\$2.46 ^c
Interest payments @ 8.5%	N/A	\$5.20
M&V payments	N/A	\$0.12
Total	\$6.15	\$7.78
	Difference:	\$1.63

Source: GAO analysis of ESPC delivery order files.

^aThis column represents the installation and construction price for the ECMs. It does not include O&M expenses, since these costs typically are appropriated annually. The price could be viewed as a proxy for the amount Congress would have had to appropriate had the ECMs been financed through timely, full, and up-front appropriations rather than an ESPC. However, because it is difficult to predict what the true cost of the asset would have been had it been financed differently, this is not a precise measure.

^bThis column represents the installation and construction price for the ECMs under an ESPC. In addition, it includes the interest and M&V costs that must be paid under an ESPC. It does not include O&M expenses, since these costs typically are appropriated annually.

^cThe present value of the installation cost is lower for an ESPC than an ECM funded through full up-front appropriations because the ESPC payments are spread over time, thus resulting in a lower present value. These lower installation costs are more than offset by the higher interest payments incurred by the government under the ESPC.

Public/Private Partnership Case Studies

Unlike ESPCs, which are fairly uniform in their structure, the term partnership can be used to describe many different types of arrangements since partnerships may take a variety of forms. For the purposes of this report, these arrangements typically involve a government agency contracting with a third party to renovate, construct, operate, maintain, or manage a facility or system, in part or in whole, which provides a public service.¹ Under these arrangements the agency may or may not retain ownership of the public facility or system, but the private party generally invests its own capital to design and develop the properties.

Congress has already enacted legislation that provides specific agencies² with statutory authority to enter into partnerships. Four of the five partnerships we reviewed were done under a specific law³ that enabled VA to enter into a type of partnership known as enhanced use (EU) leases. An EU lease is an asset management tool used by VA that includes a variety of different leasing arrangements (i.e., lease/develop/operate, build/develop/operate). EU leases enable VA to outlease VA-controlled property to the private sector or other public entities to be improved for either VA's use or non-VA uses. In return, VA receives fair consideration (monetary or in-kind) that enhances its mission or programs.⁴ Agencies without specific partnership authority, such as DOE, have used other authorities as the basis for partnerships.⁵

Potential benefits of partnerships include

- attainment of efficient and repaired federal space,
- reduction of costs incurred from using functionally inefficient buildings,
- development of underutilized federal real property,

¹GAO, *Public-Private Partnerships: Key Elements of Federal Building and Facility Partnerships*, [GAO/T-GGD-99-81](#) (Washington, D.C.: Apr. 29, 1999).

²This additional management tool has been authorized for VA, DOD, and the National Aeronautics and Space Administration.

³38 U.S.C. § 8161-8169.

⁴See figure 3 on page 18 for a list of the basic elements of an EU lease.

⁵See page 18 for a more detailed discussion about other authorities.

- in-kind benefits, and
- access to private sector expertise.

Critics of partnerships caution, however, that these ventures are not the least expensive means of meeting capital needs, although in the short term they may appear to be. For example, OMB staff have indicated that where there is a long-term need for property by the federal government, it is doubtful that a partnership would be a more economical means of financing than directly appropriating funds for renovation.⁶

Partnerships must conform to budget scorekeeping rules and OMB instructions published in OMB Circular A-11. According to A-11, partnerships should not be used solely or primarily as a vehicle for obtaining private financing for federal construction or renovation projects. Ultimately, partnerships need to be evaluated on a case-by-case basis to determine the best economic value for the government.

In some instances, case study agencies used partnerships to acquire capital assets without having to obtain congressional appropriations for the full costs up front. For example, one agency used existing authority specifically to work around OMB budget scorekeeping instructions, allowing the agency to obligate annual lease payments rather than the full cost of the project it would have otherwise needed to obligate up front.

⁶GAO, *Public-Private Partnerships: Factors to Consider When Deliberating Governmental Use as a Real Property Management Tool*, [GAO-02-46T](#) (Washington, D.C.: Oct. 1, 2001).

This appendix contains summaries of our five case studies from two agencies: DOE and VA.

DOE

Oak Ridge National Laboratory, Tennessee

VA

Atlanta Regional Office Collocation, Georgia

Medical Campus at Mountain Home, Tennessee

Vancouver Single Room Occupancy, Washington

North Chicago Energy Center, Illinois

For each case study, we describe the background and structure of the partnership, its risks, costs and benefits, and budget scoring issues. We were unable to compare the costs agencies would have incurred had they financed the assets through timely, full, and up-front appropriations instead of partnerships. Although the government incurs higher interest costs compared to up-front financing, we were unable to evaluate claims that other factors, such as lower labor costs and fewer bureaucratic requirements available to private partners, may have reduced costs. Thus, we were unable to judge whether partnerships could be less expensive overall.

DOE Oak Ridge National Laboratory, Tennessee

DOE used existing law to structure a partnership that enabled it to obtain the use of facilities for up to 25 years without recording large up-front obligations and outlays. DOE's contractor, UT-Battelle, LLC, obtained about \$70 million in private financing for new office and research facilities at Oak Ridge National Laboratory (ORNL). ORNL is DOE's largest science and energy laboratory. ORNL was established in 1943 as part of the Manhattan Project to pioneer a method for producing and separating plutonium. Today, ORNL leads the development of new energy sources, technologies, and materials and the advancement of knowledge in the biological, chemical, computational, engineering, environmental, physical, and social sciences. Since April 2000 ORNL has been managed and operated by a private, limited liability partnership between the University of Tennessee and Battelle Memorial Institute, UT-Battelle, LLC. As ORNL's management and operations (M&O) contractor, UT-Battelle, LLC's primary

client is DOE. The M&O contract with DOE is a 5-year performance-based contract with an option for DOE to renew for an additional 5-year term.

Shortly upon winning the M&O contract, UT-Battelle, LLC, submitted a Strategic Facilities Revitalization Plan for construction of a total of 11 new facilities and renovation of existing facilities at ORNL during the first 5-year phase of the program. Given the magnitude of needed facilities improvements and the historical funding levels, this plan proposed a partnership to secure funding for new construction and renovation of existing space through a combination of federal, state, and private funds—about \$225 million, \$26 million, and \$70 million, respectively.

One key component of this proposal was the transfer of land ownership from DOE to a special-purpose entity to allow for construction and lease of buildings by the private sector. Section 161(g) of the Atomic Energy Act⁷ permitted DOE to transfer at no cost, via quitclaim⁸ deed, 6.6 acres of land at ORNL to a special-purpose entity, UT-Battelle Development Corporation (UTBDC), for the construction of three buildings.⁹ UTBDC, a 501(3)(c) nonprofit corporation, was created for the sole purpose of implementing the privately financed elements of the revitalization project, and the selection of UTBDC was not based on a competitive process. However, upon receiving the land, UTBDC issued a 25-year ground lease for the 6.6-acre site to Keenan Development Associates, of Tennessee, LLC (Keenan), a private developer competitively selected to build the new facilities. As described below, UTBDC provided design specifications and construction oversight and functioned essentially as a pass-through entity for the land, financing, and leasing of the three buildings reviewed in this case study.

⁷Section 161(g) of the Atomic Energy Act, codified at 42 U.S.C. 2201(g), authorizes the Secretary of Energy to “acquire, purchase, lease, and hold real and personal property...and to sell, lease, grant, and dispose of such real and personal property. . . .”

⁸A legal instrument used to release one party’s right, title, or interest to another without providing a guarantee or warranty of title.

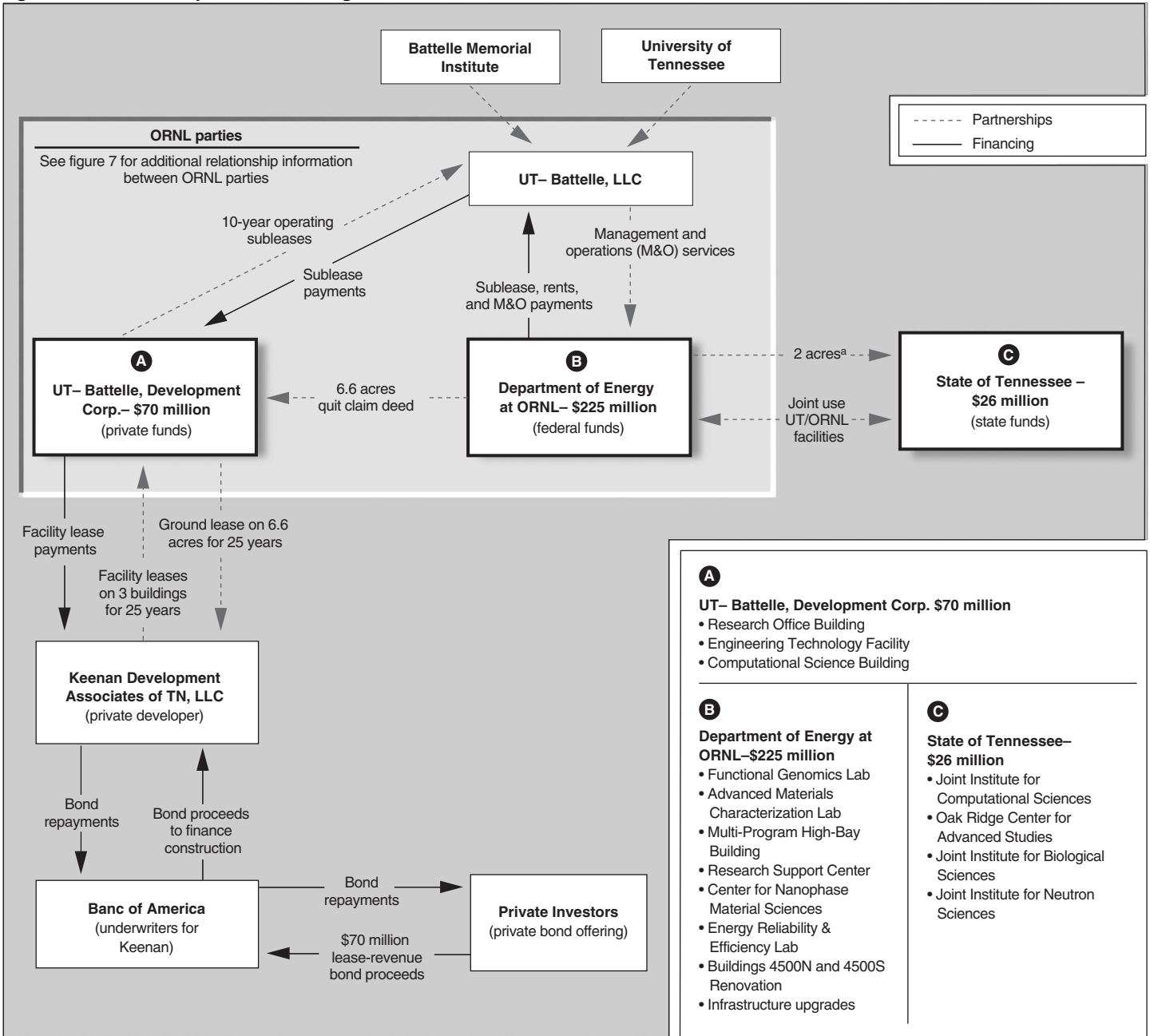
⁹The three privately constructed buildings are the Computational Sciences Building, the Research Office Building, and the Engineering Technology Facility.

Once private financing (bonds) was obtained and construction of the three buildings was completed, Keenan implemented three prenegotiated facility leases for these buildings with UTBDC for a term of 25 years.¹⁰ UTBDC, in turn, implemented subleases of the three facilities to UT-Battelle, LLC, for DOE's ultimate use, with a lease-term up to 25 years.¹¹ Accordingly, DOE reimburses UT-Battelle, LLC, for the sublease payments, which flow back to Keenan to pay off the outstanding bonds. Figure 12 depicts the full partnership arrangement used to revitalize ORNL, including the financing just described.

¹⁰The facility leases provide that UTBDC may sublease any part of its premises, and it may assign its leases of the facilities to "an entity other than DOE or its designee." Therefore, if DOE chooses to terminate any of its subleases, UTBDC may sublease the property to another organization and still ensure bond payments are covered.

¹¹The subleases from UTBDC have an initial term of 10 years followed by three 5-year renewals, for a total of 25 years. Pursuant to the quitclaim deed, DOE reserves the right to repurchase any part of the land conveyed for a nominal consideration, provided that no subleases have been terminated during the 25 years.

Figure 12: Partnerships and Financing of ORNL's Revitalization



Source: GAO analysis.

^aThe 2-acre transfer was for two of the four state-financed facilities. A subsequent land transfer will be necessary for the remaining two facilities.

Risk

Ultimately, the principal and interest on the bonds are covered by DOE's sublease payments (if the subleases run for their full 25-year term), as specifically recognized by Standard and Poor's (S&P) A+ rating of the bonds. However, DOE officials told us they neither reviewed the private bond-offering memorandum nor asked to see it. According to DOE's Counsel, a DOE review of the bond-offering memorandum would not have been consistent with the fact that this was a private transaction between Keenan and private investors. In addition, UTBDC's Counsel said he was careful to make clear that the sublease contained a 1-year termination clause to ensure DOE's involvement was not misrepresented; instead UTBDC and its backers bear the risk associated with the bond repayments. Furthermore, UTBDC officials told us that in excess of \$1 million of UTBDC private funds were expended in support of the construction effort. Although UT-Battelle officials were unwilling to provide us a copy of the bond-offering memorandum,¹² S&P's A+ bond rating report states that its rating was based, in part, on a pledge of DOE rent payments, since DOE was unlikely to vacate the facilities.

¹²UTBDC officials stated that the Battelle Memorial Institute has spent millions developing this financing structure as well as the language of the bond offering. The officials stated that this information is proprietary and provides them with a business advantage over others competing for DOE revitalization projects at other campuses.

Costs and Benefits

DOE officials could not provide us with any documentation showing that the agency had performed an independent cost-benefit or business case analysis¹³ of the private financing arrangement. The Chief Financial Officer (CFO) of DOE's Oak Ridge Operations office asserted that private financing and construction would be less expensive than appropriations because the accelerated completion time¹⁴ would enable them to more quickly vacate dilapidated buildings that were expensive to operate and maintain. According to DOE officials, in addition to dollar costs, the obsolete buildings were affecting the recruitment and retention of top-quality scientists needed to further DOE's mission. Although no appraisal was made of the land prior to turning it over via quitclaim deed, which was given to UTBDC free of charge, several DOE officials said they believed the land was without value.¹⁵ Moreover, although unable to provide supporting documentation, several officials said they believed that DOE's then CFO would have looked into the costs and benefits. According to UT-Battelle, LLC's Deputy Director for Operations, the former CFO received summary analyses addressing the cost-benefit study performed by UT-Battelle, LLC. The Deputy Director further explained that the former CFO visited ORNL for a full day briefing and walk-around to review the proposed project. The summary information provided by UT-Battelle, LLC, to the former DOE CFO was, in our opinion, not sufficient for a detailed, business case analysis. The type of underlying data needed to perform such an analysis

¹³A business case analysis is a tool for planning and decision making that projects the financial implications and other organizational consequences of a proposed action. The overriding purpose of a business case analysis is to make transparent to decision makers all the objectives to be met by a facilities investment, the underlying assumptions, and the attendant costs and potential consequences of alternative actions. The overriding purpose of these analyses is to allow decision makers to (1) see and understand all the objectives to be met by a facilities investment and the potential consequences of facilities investment decisions and (2) make informed choices about owning, leasing, reinvesting in, or constructing facilities.

¹⁴It is periodically argued that privately contracted construction can be completed faster than federally contracted construction. While we could not find any formal studies of this, there is some evidence to support this theory. For example, although the three buildings constructed privately were conceptualized at the same time as DOE's highest priority construction on the ORNL reservation, the privately constructed buildings were completed and occupied in the summer of 2003, while the federally contracted building is not scheduled for completion until the summer of 2005. In addition, UT-Battelle, LLC, officials provided summary data on the construction costs per square foot for the privately constructed versus estimated government construction, which showed that private construction costs were roughly 30 percent less expensive for comparable space.

¹⁵In 2002, the city of Oak Ridge appraised the transferred land for \$79,400.

had been prepared by UT-Battelle, LLC, and was readily supplied to us upon request. UT-Battelle, LLC, officials said that DOE also would have been provided this data had it been requested. According to UT-Battelle, LLC's estimates prior to the start of the project, the privately-contracted construction that was used would have cost about \$45 million compared to about \$101 million had DOE contracted directly for the construction itself.¹⁶

The value of the bonds issued by Keenan to construct the three buildings totaled about \$70 million. However, the actual cost to construct, according to UTBDC's analysis, was about \$54 million. Our analysis of DOE's subleases shows that the 25-year PV that DOE will pay to lease the three privately financed buildings will total about \$96 million.

Budget Scoring

According to DOE and UT-Battelle officials, a key concern of the financing arrangement was ensuring that it would score as an operating lease¹⁷ and thus only require the annual sublease payments (plus cancellation costs) to be obligated and shown in the budget.¹⁸ Had it not met the operating lease criteria, DOE would have had to obligate in the first year of the sublease sufficient budget authority to cover the PV of the government's sublease payments over the full 25-year lease term. Given this concern, the terms of the partnership were carefully constructed to ensure it would be scored as an operating lease. For example, by giving the land to UTBDC, DOE ensured that the project would not be located on government property. Also, by establishing short-term subleases, UT-Battelle, LLC, ensured the lease term did not exceed 75 percent of the estimated economic life of the asset. Had the buildings been constructed on government land or the lease term exceeded 75 percent of the economic life of the asset, the arrangement might have been treated as a capital lease and DOE would have had to obligate the full costs of the project up front.

¹⁶UTBDC assumed that full appropriations for DOE-contracted construction would be made available over a 10-year period.

¹⁷See figure 1 on page 12 for the definition of an operating lease.

¹⁸On December 26, 2000, DOE/Oak Ridge Operations' Chief Counsel opined that OMB Circular A-11 did not require coverage of leases entered into by DOE contractors. However, it had been DOE's policy to apply Circular A-11 to such leases.

VA Atlanta Regional Office Collocation, Georgia

In 1998, VA used its EU lease authority to leverage more than \$32 million in private financing for the collocation of the Atlanta VA Regional Office (VARO) on department-owned property adjoining the VA Medical Center in Dekalb County, Georgia. The collocation provides both benefits and medical services on a single campus resulting in increased convenience to veterans receiving services from VARO and the VA medical center. Previously, the Atlanta VARO had been located in a GSA-controlled building in midtown Atlanta. With its lease scheduled to expire, VA considered moving the VARO into a new GSA-controlled building in downtown Atlanta, known as the Atlanta Federal Center (AFC). However several factors prompted VA to research other alternatives. The move to the AFC would have (1) tripled VARO's rent to GSA; (2) separated VARO's offices over more space than required; and (3) according to the Georgia VA Commissioner, provided inadequate parking access for disabled veterans.

VA ultimately collocated the VARO onto property adjoining the VA Medical Center in Dekalb County by entering into a 35-year partnership with the Dekalb County Development Authority (the Authority).¹⁹ According to the EU lease, the VARO project would increase employment and expand economic development in Dekalb County. Under the partnership, VA outleased six acres of VA-owned property to the Authority for a 35-year period. In exchange for the lease, the Authority agreed to finance, develop, own, operate, and maintain a furnished and equipped office building and parking garage. To finance the project, the Authority issued revenue bonds in excess of \$32 million. VA then leased back the office space needed from the Authority's developer through 2-year operating leases, which automatically renew for up to nine consecutive terms unless VA takes positive action to terminate the automatic renewal clause.²⁰ At each renewal of the lease, VA maintains the right to reduce the amount of office space it occupies if its requirements change.

Risk

According to the EU lease, the construction of the VARO building and parking was a private undertaking of the Authority and not an undertaking

¹⁹The Authority was created by the Georgia General Assembly for the purpose of promoting trade, commerce, industry, and employment opportunities for the public good and to promote the general welfare of the state.

²⁰VA officials informed us that they have changed this practice so that future leases will require VA to take positive action to renew rather than terminate.

of VA. Additionally, the Authority bears the risk and responsibility to operate, maintain, repair, and replace assets in the event of a causality loss, and holds the title to the office building and parking garage as long as the revenue bonds are outstanding. At any time during the ground lease, VA has the right to acquire the improvements from the Authority for a purchase price equal to the sum necessary to make the payment of the bonds. Upon expiration or termination of the EU lease, title to all improvements on the land automatically transfers to VA.

To mitigate the risks to the Authority if VA does not renew the lease or reduces the amount of space it occupies in the VARO building, VA deposited \$1.8 million into a “renovation reserve fund” when the lease was executed. The Authority may draw from this fund to renovate or reconfigure rental space for new tenants should VA vacate some part of the VARO building during the term of the bonds. VA officials said that by agreeing to a reserve fund, VA’s rent would be reduced because bonds were sold to investors at a lower interest rate, thus reducing the Authority’s debt service and, in turn, VA’s rental payments. VA also mitigated the Authority’s risk by agreeing not to replace the VARO building with another regional administration or headquarters building in Georgia using its EU lease authority during the term of the bonds. According to VA, the Authority passed on additional risk mitigation savings to the department by obtaining bond insurance that guaranteed timely payment of principal and interest to bondholders.

Costs and Benefits

Thirty-five-year PV life-cycle costs for the project were estimated to total about \$43 million, while the Authority bond issue totaled about \$33 million. Although VA compared the cost of the collocation to the costs of moving into the AFC,²¹ the department decided not to compare the costs of construction via EU lease to full, up-front financing. According to VA officials (1) VA did not believe it would receive up-front appropriations for VARO construction and (2) internal VA protocol did not require economic comparisons between all possible acquisition alternatives.

²¹Thirty-five-year PV lease payments for less space in the AFC would have totaled roughly \$105 million, without the added benefit of parking, furnishings, and equipment.

Budget Scoring

Because the VARO collocation project was scored as an operating lease, VA's 2-year lease payments to the Authority are the only aspects of the arrangement reflected in the budget. VA officials said this scoring treatment is appropriate since VA may decide to vacate part or all of the building before the 35-year ground lease expires. The officials explained that VA may need less office space when electronic filing systems eventually replace existing paper-based systems. Also they noted that a short-term lease provides flexibility in the event that VA's field structure changes over time. However, it is not clear that VA's need for the space is necessarily short-term. For example, prior to the collocation of the Atlanta regional office with the medical center, the regional office had occupied offices in the Atlanta area for over 25 years. Scoring the EU lease as an operating lease assumes that its need is short-term, even though VA has no current plans to vacate the space.

VA Medical Campus at Mountain Home, Tennessee

In 1998, VA entered into an EU lease with its local affiliate, James H. Quillen College of Medicine of East Tennessee State University (ETSU), and the State of Tennessee.²² Under the EU lease, VA transferred to ETSU the long-term maintenance and development responsibilities of 31 acres of land, including nine buildings, on VA's medical campus property in Mountain Home, Tennessee, for a term of 35-years. After the expiration of the lease, VA may transfer the fee simple title to the property to the State of Tennessee; however, VA made no guarantees to any such transfer. The EU lease superseded existing leases of buildings and land where ETSU occupied the facilities while VA was responsible for the maintenance and capital improvements, without reimbursement from ETSU.

Risk

Under the EU lease, the federal government retains a fee simple ownership interest in the property. However, during the term of the lease, VA is not responsible for damages to the property or for injuries to persons on the property, except as provided for by applicable law. In the event that any part of the property is damaged or destroyed, other than as a result of VA's negligence, the state is obligated to repair, restore, or rebuild the property.

²²VA manages the largest medical education and health professions training program in the United States. VA facilities are affiliated with 107 medical schools, 55 dental schools, and more than 1,200 other schools across the country.

Costs and Benefits

VA projected that the initiative would result in a cost avoidance of approximately \$34.6 million (PV) in capital management costs over the lease term. Also, through the term of the lease, an additional \$6.3 million (PV) of “in kind consideration” medical services and possible groundskeeping services would be provided to VA by ETSU staff and residents each year. According to VA’s capital asset management study, these benefits were equivalent to the \$40.9 million value of the capital assets to be leased to ETSU.

According to VA officials, ETSU assumed responsibility for the maintenance of the buildings so that it could make capital improvements that VA was unwilling to undertake, such as the renovation of labs and heating, ventilation, and air conditioning systems. VA’s business case states that VA would also benefit from the improved medical school facilities since the improvements would increase funding of research, including equipment, supplies, and technicians for VA physicians working at the medical school, where such resources are not provided by grants.

Budget Scoring

Because the arrangement did not involve cash transfers, the EU lease is not reflected in the budget.

VA Vancouver Single
Room Occupancy,
Washington

In 1998, VA outleased about 1.4 acres of vacant, undeveloped land²³ adjacent to the Vancouver Division of the Portland VA Medical Center. The 35-year, no-cost outlease was awarded to the City of Vancouver’s Housing Authority (Housing Authority).²⁴ The Housing Authority subsequently financed, designed, and built a 126-bed single room occupancy (SRO) structure on the property in order to provide transitional and permanent housing for single homeless individuals of southwest Washington. The Housing Authority agreed to give veterans referred by the Portland VA

²³In January 1998, appraisers estimated the value of the land at \$350,000.

²⁴The Vancouver Housing Authority is a public municipal corporation that derives its authority from Washington State Law RCW 35.82. It is governed by a six-member Board of Commissioners appointed to staggered 5-year terms, with the exception of the Resident Commissioner who is appointed to a 2-year term. All are appointed by the Mayor of Vancouver, Washington, and abide by state laws governing conflicts of interest, open public meetings, and rules of conduct for public officials.

Medical Center priority placement for at least 50 percent of the occupancy of the SRO property.

Risk

The EU lease required the Housing Authority to bear all costs and responsibility for developing and constructing the SRO. In addition, the lease made the Housing Authority (1) responsible for all repair and maintenance costs associated with the SRO and (2) subject to the risk of loss or damage occurring on the property.

Unless VA decides to dispose of the property, the Housing Authority must surrender the SRO and other improvements on the property to VA upon termination or expiration of the lease. The Authority is responsible for the development, construction, repair, and maintenance of the SRO. Although in our opinion VA bears minimal risk, the construction on the property represents an opportunity cost to VA.

Costs and Benefits

According to a VA official, the property would likely have remained unused without the EU lease arrangement. Although priority placement enables VA to reduce costs by expediting the release of patients from its medical center,²⁵ VA stated it had not previously considered using the land until the Housing Authority approached VA with the SRO idea.

Budget Scoring

Because the transaction did not involve cash consideration, it was not reflected in the budget.

²⁵It is generally accepted that about one-third of homeless people are veterans.

VA North Chicago Energy Center, Illinois

In 2002, VA used its EU lease authority to initiate the development of a cogeneration facility that could provide chilled water, electricity, and steam to its 190-acre campus in North Chicago, Illinois. Prior to this EU lease, VA purchased electricity from the local utility and steam from an adjacent Navy facility. According to a study, VA determined that VA's energy costs in North Chicago were 60 percent higher than average and VA determined that the rates charged by the Navy for steam were above market rates.²⁶

According to VA's analysis, VA determined that using an EU lease for the development, construction, and O&M from a third party of an energy center on the campus would be the most efficient and cost-effective way to meet the energy requirements of the North Chicago VA Medical Center, compared to federally contracted construction or purchasing energy (steam and electric) from local sources. In 2002 VA signed a 35-year EU lease with Cole Taylor Bank as trustee of the North Chicago Energy Trust (Trust) to lease approximately 1 acre of land appraised at \$110,000. In return the Trust hired Energy Systems Group as the developer to (1) develop, design, equip, construct, operate, and maintain the Energy Center; (2) engage in sales of energy services to third parties; (3) provide energy-related services including operating and maintaining the VA Medical Center's systems for chilled water, electricity, steam, and its respective distribution systems; and (4) undertake energy savings initiatives at the VA Medical Center and other VA facilities in the area. The Trust's trustee borrowed on behalf of the Trust through the Illinois Development Finance Authority (IDFA)²⁷ about \$37 million in bonds, secured by the leasehold interest and its improvements. VA is the sole beneficiary of the Trust.

²⁶According to VA officials, VA determined there was no commercial market supply for steam in North Chicago. VA officials also stated they determined VA was paying above-market rates for steam by surveying the marketplace in downtown Chicago.

²⁷The Illinois Development Finance Authority issued the bonds with the North Chicago Energy Trust as the borrower through its trustee.

Risk

The energy service agreement between VA and the Trust sets the standards and terms for VA to purchase steam and electricity generated by the energy center. VA may terminate the agreement under default provisions if the developer cannot complete the development or perform and supply energy as specified in the agreement. According to a VA official, VA then would in sequence (1) request that the Trust select another firm to run the center or (2) take over operation of the center. The bonds were issued by IDFA and the Owner Trust is responsible for repayment of the bonds in the event of a failure to perform or any other breach of the agreement. The EU lease holds the developer responsible for any loss, cost, or liability of an environmental nature that arises out of the developer's acts or omissions in conjunction with the property. The Owner Trust is responsible in the event there is a loss of assets, such as through fire. If VA vacates the campus as part of its mission, VA has no responsibility or liability for any future payment of the bonds. In accordance with its legislative authority, VA may elect to transfer its interest in the land that the energy center was built on to the Owner Trust, so that the Trust may continue operations or pay off the bonds. According to VA officials, they initiated the Trust arrangement for this EU lease to protect the government in the event of bankruptcy or foreclosure of a developer/operator and if the developer did not or could not complete the project. By using a trust, the bond revenues belong to the Trust and are paid to the developer.²⁸ The Trust maintains title to improvements during the lease term, afterwards title transfers to VA at the end of the lease term.²⁹

Costs and Benefits

VA contributed no funding for the development of the energy center.³⁰ According to VA officials, constructing and running energy centers is not within VA's mission and it would not have put forward a request to do so. VA estimated that a new energy center would save VA about \$12.7 million (net present value) over 10 years compared to its current costs for

²⁸If the developer needed to be replaced, funds would still be available in the trust to hire a new developer and complete the project. This did not become an issue and the project was completed and operational in 2003.

²⁹A provision allows VA to obtain the title earlier by paying the balance of the secured indebtedness, all reimbursement obligations, and interest and redemption premium amounts on the bonds.

³⁰The only VA investment in the EU lease is the outlease of real property to the Owner Trust valued at \$110,000.

electricity and steam. The new energy center system runs parallel to the local utility, which gives VA a backup source of electricity. At one point before VA entered into the EU lease, it was paying the Navy over \$3 million for steam and the local utility over \$1 million for electricity. VA accounted for 14 percent of the steam generated by the Navy facility and, according to VA's business plan, VA could end its steam purchases without creating a substantial loss to the Navy. The Navy would be able to reduce its steam pressure and in turn increase its efficiency. Navy officials confirmed that while the Navy had lost revenue, VA steam consumption was not a significant portion of its business.

Budget Scoring

The utility costs for the VA complex are reflected in the budget on an annual basis but no other scoring for this project is reflected in the budget. After this EU lease was signed, OMB has stated that under new scoring instructions the costs associated with trusts should be scored up-front since (1) VA maintains control of the assets acquired through the trust and (2) VA bears the risk for these assets.

Comments from the Department of Defense

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



ACQUISITION
TECHNOLOGY
AND LOGISTICS

OFFICE OF THE UNDER SECRETARY OF DEFENSE
3000 DEFENSE PENTAGON
WASHINGTON, DC 20301-3000

OCT 25 2004

Ms. Susan Irving
Director, Federal Budget Analysis
Government Accountability Office
Washington, D.C. 20548

This is the Department of Defense (DoD) response to the GAO Draft Report, 'CAPITAL FINANCING: Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns,' (GAO Code 450262), dated 24 September 2004. Detailed comments on the report are enclosed. The Department is concerned that the draft report reflects an incomplete analysis and an incorrect understanding of the Energy Savings Performance Contract (ESPC) program.

I urge your strongest consideration to revisit this report and comprehensively address the issues we have raised prior to issuing this report in final form. My staff is prepared and willing to assist your team to more accurately assess the ESPC program. We would also appreciate an additional opportunity for review prior to any final publication.

Philip W. Grone
Principal Assistant Deputy Under Secretary of Defense
(Installations and Environment)

Enclosures:
As stated



GAO DRAFT REPORT - DATED SEPTEMBER 24, 2004
GAO CODE 450262/GAO-05-55

“CAPITAL FINANCING: Partnerships and Energy Savings Performance Contracts
Raise Budgeting and Monitoring Concerns”

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

Recommendation 1. The GAO recommends that the Director of OMB work with scorekeepers to develop a scorekeeping rule that would ensure that funds are obligated to reflect the full commitment of the government, considering the substance of all underlying agreements, when third party financing is employed. (p. 38/GAO Draft Report)

DoD Response: We partially concur. We would concur in full if the recommendation was modified to also properly consider guaranteed savings. We believe that OMB and CBO should review their current scorekeeping procedures and develop an approach suitable to a program such as ESPC such that the contractually guaranteed savings are also equitably considered and given due credit. Of significance is that no increase in appropriations are required for ESPC contracts.

Recommendation 2. The GAO recommends that the Secretary of Defense perform business case analyses and ensure that the full range of funding alternatives, including the technical feasibility of useful segments, are analyzed when making capital financing decisions. (p. 38/GAO Draft Report)

DoD Response: We do not concur. A business case analysis suggested by the report would only translate to an increased administrative cost to the Department in the absence of a viable option to directly finance energy conservation projects. To make this recommendation applicable and useful to the decision maker, GAO should add language encouraging the Congressional appropriation and authorization committees to support the President’s budget, line item “Energy Conservation Investment Program” in the Military Construction (MILCON) bill. Using direct appropriations is not a realistic, available option without imposing an impact to some other aspect of the budget. The current recommendation essentially promotes eliminating a program that has accounted for well over 50% of our energy reduction against the Congressionally-mandated goals without providing a viable, alternative approach for Congress, or the Department to pursue. Also of note is that prior to any ESPC contract award, a complete life cycle cost analysis is conducted, including all cost benefit considerations, to ensure that each contract is financially favorable and meets the short and long term needs of the Government.

See comment 1.
Now on p. 44.

See comment 2.
Now on p. 44.

GAO DRAFT REPORT – DATED SEPTEMBER 24, 2004
GAO CODE 450262/GAO-05-55

“CAPITAL FINANCING: Partnerships and Energy Savings Performance Contracts
Raise Budgeting and Monitoring Concerns”

DEPARTMENT OF DEFENSE TECHNICAL COMMENTS
TO THE REPORT

Comment: On the cover sheet in the second paragraph under the heading, “What GAO Found”, it is mentioned that “there is insufficient data to measure” opportunity costs.

See comment 3.

DoD Response: We strongly non-concur. We believe the analysis conducted in this draft report falls well short of properly responding to the issues of concern provided by the Federal energy management community. The GAO audit team could conduct a few economic assessments that would translate the projected annual savings of a given energy conservation project into future year dollars which would represent the “value” associated with lost opportunity costs for an otherwise viable, desirable project delayed for a given period of time. We also question the statistical relevance of the one project that indicated a cost increase of 56 percent as a result of using alternate financing. If that project was an exception and had unique circumstances, it certainly does not present a fair representation of the true increased cost of alternate financing, which we would argue is much closer to the lower end of the range provided. A more probable range of cost increase, given the contracts analyzed, is 25 to 35%, assuming direct funding is available in a timely manner. It also appears that “risk” was not duly considered in the cost analysis. If an energy conservation project was funded with direct appropriations, the performance risk falls entirely on the government. While the contractor or supplier will guarantee the proper functioning of their product, they do not guarantee its performance with respect to energy efficiency. Conversely, the risk of performance in an alternatively financed arrangement such as an ESPC resides with the contractor and requires guaranteed energy savings. The cost associated with transference of risk should be considered and accounted for.

See comment 4.

See comment 5.

Comment: On page 16, the report concludes that “ESPC commitments are not fully recognized up-front in the budget.”

See comment 6.
Now on p. 21.

DoD Response: We do not concur. The report does not properly articulate that the “commitments” are paid for from the existing, current appropriation levels, which are recognized up-front in the budget. The report misleads the reader to believe that an ESPC contract has committed Congress to funding above and beyond what is budgeted for each year in the President’s budget and provided in the subsequent Congressional appropriation, which is not accurate. It should be highlighted that without these ESPC contracts, the opportunity to reduce future levels of required commitments via installation utility bills is lost. While we agree some form of scoring, that perhaps only considers cancellation or termination fees, is appropriate, the current strategy for scoring is

inadequate to properly account for the savings that are generated and ultimately fund the financial obligations of concern.

Comment: On page 20, it is asserted that, “acquiring capital through ESPCs is more expensive than acquiring the same capital through full, up-front appropriations in our case studies.”

DoD Response: We strongly non-concur. This report falls short in its due diligence to inform Congress of the “added cost” through the lost opportunity for energy reductions to actually lower its future funding levels. The final report and recommendations are a reflection of an incomplete analysis that gives cursory mention to facts that might support the opposite conclusion, that ESPCs are a better value to the government. Particularly, most every “pro” while mentioned, was provided the same common responses, either “there is insufficient data to measure this effect” or “we did not analyze these claims.” Government officials provided valid suggestions that the audit team consider and incorporate in their analysis including the cumulative effect of aggregating energy conservation measures, the lost opportunity costs of delays while sitting on an “unfunded” list for scarce, highly competitive direct appropriations, the minimized administration and overhead associated with contracting and administration, decreased equipment maintenance costs, and the decreased risk of performance to the government. Additionally, and perhaps not considered at all by this report, ESPC contracts provide a venue for the private sector to recommend technical solutions that the government would not otherwise be aware of and in a position to pursue through direct appropriations. The ESPC contract vehicle provides an incentive for the private sector to research, identify, propose and implement the most suitable technology, in the form of an ECM, and guarantee that the technology’s performance will achieve results in the form of energy savings, all while minimizing the administration and overhead (increased costs) that the government would otherwise have to retain. Last, without ESPC authority for the entire past year, there are numerous examples of “unfunded” or “stalled” energy conservation projects that could be considered in a calculation of the “lost opportunity costs” when “awaiting direct appropriations.” All of these points received cursory consideration at best, yet could have a significant impact on the conclusions and findings. We are concerned that this report does not present a fair and unbiased assessment of the ESPC program.

Comment: On page 21, it is stated that, “M&V resulted in higher sustained savings but is an expense that would not be incurred if the ECMs were acquired through full, up-front appropriations.”

DoD Response: We do not concur. Measurement and Verification has a direct relationship with energy and cost savings and risk of performance. The application of direct appropriations would not result in the cost of M&V. However, in that case, the anticipated energy and cost savings are not guaranteed, are not measured and verified, and are less likely to result to the same magnitude, changing the payback portfolio and extending it over a longer period, in some cases potentially beyond the effective life of the equipment. The other significant aspect of M&V is that it removes risk of

See comment 7.
Now on p. 27.

See comment 8.

See comment 9.

See comment 10.
Now on p. 27.

performance from the government and places the burden on the contractor to properly estimate and maintain performance over the life of the contract. While it may be an added direct cost, it is easily paid for through the increased guaranteed savings. The report's statement that it is an "additional cost" is misleading since it, like the entire investment, is paid for from savings. This point, if included in the analysis, could verify or discount mathematically the added value of M&V to ECM performance and payback periods.

Comment: On page 24, it is stated that, "The performance of ECMs installed through the use of ESPCs are guaranteed to reduce energy use during the term of the contract so that payments to the contractor can be made from the savings from lower utility bills. ESPCs contain assumptions for such things as hours of operation and ECM efficiency which, taken together, determine estimated savings. However, if the assumptions are incorrect and estimated savings are not achieved, the agency is still required by contract to pay the ESCO the agreed-upon savings specified in the ESPC."

DoD Response: We strongly non-concur. The report has drawn an incorrect conclusion. If there is a reason to believe that non-performance is attributable to the government's actions, contractually the ESCO is bound to present and defend any evidence prior to any payments being authorized.

Comment: On page 31, there is speculation that, "a business case analysis might have demonstrated that sufficient funds were available to purchase the ECMs in smaller, useable segments, when technically feasible."

DoD Response: We strongly non-concur. The GAO report should go beyond speculation. There is no evidence that the analysis attempted to quantify the increased administrative cost to the agency of conducting a business case analysis for every energy conservation project they may contemplate, nor does it demonstrate the added value a business case analysis might provide to a decision maker confronted with limited direct appropriations at their disposal to meet mandated energy reduction goals.

Comment: On page 32, it is stated that buy-downs, "imply opportunities exist to acquire ECMs in smaller, useful segments, when technically feasible."

DoD Response: We strongly non-concur. This is an inappropriate and incorrect conclusion stemming from an incomplete analysis. First, buy-downs are typically only an extremely small percentage of the overall contract and certainly not a reflection that the ECMs could be otherwise financed in this manner. Also, the opportunities for buy-downs are not predictable. They typically result from the unique circumstances such as those described in this report. Most often, buy-downs only occur when previously programmed projects can be cancelled due to the timing of the ESPC and their funding then redirected. It would appear that these same cases where buy-downs occurred could have been analyzed by the GAO team from the aspect of projects that had been deferred and had been "awaiting funding" for several years thus presenting and quantifying the

See comment 11.
Now on p. 29.

See comment 12.
Now on p. 38.

See comment 13.
Now on p. 39.

“lost opportunity” costs that this same report concluded could not be analyzed for lack of evidence.

Comment: Page 37 states that, “in a federal setting, even the appearance of a problem such as a conflict of interest is of concern because it can erode the public’s confidence in the government and ultimately degrade an agency’s ability to carry out its mission.”

DoD Response: While we agree in concept with the statement, we do not understand its relevance in this report. There is no evidence presented in the analysis that suggests that a conflict of interest has existed or currently exists. ESPC contracts are awarded and administered by warranted contracting officers with the appropriate responsibility entrusted to them. If the GAO team has recommendations for improving the ESPC contractual relationship, we would welcome that input. Otherwise, this conclusion is unfounded and irrelevant to the report.

See comment 14.
Now on p. 43.

The following are GAO's comments on the Department of Defense's letter dated October 25, 2004.

GAO's Comments

1. We do not agree that our recommendation needs to be modified to further consider savings. We compared acquisition costs for a given set of ECMs. Therefore the savings should not vary. Regardless of how they are financed, the same given set of ECMs acquired for the same energy reduction projects should yield the same energy savings.
2. Only by doing a business case analysis can the government ensure that it selects the best alternative and that taxpayers' interests are protected. Life-cycle cost analysis is only one part of a business case analysis, which includes economic and financial analyses such as cost-benefit and comparative alternative analyses. We recognize that using full, up-front appropriations to fund ECMs would likely affect some other aspect of the budget. It is not the intent of this report to discourage or to eliminate energy conservation efforts or partnerships with the private sector. However, recognizing the full commitment up-front in the budget enhances transparency and enables decision makers to make appropriate resource allocation choices among competing demands that all have their full costs recorded in the budget. One of the primary purposes of budgeting is to make resource allocation decisions among competing claims that all have their full costs recorded in the budget.
3. Measuring opportunity costs requires estimates of how long the delay in obtaining ECMs would be and the cost of that delay. To do that, GAO would have to make an assumption about when obtaining an ECM would be of sufficiently high priority in comparison to the other programs for which an agency would request full funding. Our report does not address agencies' resource allocation decisions, but points out that the decision to acquire ECMs through ESPCs is more expensive than through timely, full, and up-front appropriations—a point with which agency officials agreed. We believe that such an analysis is more appropriately conducted by agencies as part of the business case analysis of alternatives.
4. Given our case study approach, our report does not imply a statistical relevance to any of our case study findings. We selected case studies based on their cost and data availability. The case study result that DOD questions is a delivery order awarded by GSA. Because this ESPC

involved new construction, GSA noted that the result of this case would be unique but interesting; GSA agreed with our selection of cases. We note DOD's comment that these ESPCs usually increase the government's costs by 25 to 35 percent. While this is less than the 56 percent in the GSA case study, it is not an insignificant cost differential.

5. Our report acknowledges that M&V of savings acts as a type of insurance and that M&V strategies allocate risk between the agency and the ESCO. M&V is an explicit cost in ESPCs. However, agencies could choose to purchase M&V for ECMs financed through full, up-front appropriations if, after conducting a business case analysis, they believed it was in the best interest of the government. With respect to the savings guarantee, as discussed on p. 29, ESPCs contain assumptions that determine estimated savings. If the assumptions are not correct and savings are not achieved, the agency is still required to pay the ESCO the agreed-upon savings specified in the contract. Finally, we clarified that the M&V comparison is to estimated savings.
6. We agree that appropriations are recognized in the budget. However, ESPC commitments are not in fact fully recognized up front in the budget. OMB has scored the acquisition costs of assets acquired through ESPCs annually, over time, even though ESPCs represent long-term commitments of the government. For example, agencies generally retain control of the assets acquired for the entire life of the asset. Also, agencies' termination liabilities for ESPCs typically correspond to the outstanding principal balances due to the ESCOs.
7. We did not analyze the validity of DOD's claims because DOD could provide no data supporting its claims. For example, the Navy does not maintain a central system to track savings. Therefore, it could not provide data on the amount of cost savings attributable to the use of ESPCs. DOD also did not provide sensitivity analysis reflecting the opportunity costs of waiting for appropriations. We did review the one Oak Ridge National Laboratory cost study recommended to us, *Evaluation of Federal Energy Savings Performance Contracting—Methodology For Comparing Processes and Costs of ESPC and Appropriations-Funded Energy Projects* (March 2003). In addition to our own review of the study, we interviewed the authors of the study and talked with agency officials about the study's methodology. Based on our analyses we found two major flaws with the study: (1) we agreed with the study authors that the sample size was too small and was not applicable to the entire federal sector and (2) the study compares the

costs and savings across various types of ESPCs installed in several different federal facilities, making it difficult to compare energy savings because the savings would depend upon too many unpredictable factors. Also, as discussed on pages 29 and 30, we did discuss with GSA and Navy officials their historical funding experiences. We note that DOD itself (see comment 4) says that ESPCs increase the cost to the government by 25 to 35 percent compared to timely, full, and up-front funding.

8. Our analysis recognizes the value of the technical expertise provided by ESCOs by assuming that detailed energy surveys would be needed and purchased under either funding scenario. We include the cost of this type of service in our proxy for the amount Congress would have to appropriate had ECMs been financed through timely, full, and up-front appropriations. Further, our report notes that agencies' heavy reliance on the ESCOs to recommend, install, and perform M&V to verify results on their recommended ECMs creates potential conflicts of interest that require active participation and scrutiny by agencies.
9. See comment 3.
10. See comment 5.
11. This information was taken directly from a FEMP document that FEMP provided in one of its training courses offered to agencies (Super ESPC Agency Project Binder, July 2004). On page 6 of the chapter entitled, "Introduction to M&V for DOE Super ESPC Projects" it says, "In the event that the stipulated values overstate the savings or reductions in use decrease the savings, the agency must still pay the ESCO for the agreed-upon savings."
12. In our opinion, because large buy-downs indicate the availability of funds in the first year of the contract, they imply there may have been opportunities to purchase ECMs in smaller, useable segments, when technically feasible. However, because DOD prepared no business case analysis to determine the viability of this alternative, it cannot be known whether this would have been cost effective or not. Business case analyses are well accepted as a leading practice among public and private entities. OMB requires all executive branch agencies to prepare business case analyses for major investments as part of their budget submissions to OMB.

13. For our case studies, buy-downs did not always represent an “extremely small percentage of the overall contract.” As discussed on page 39 of the report, three of the six case studies we reviewed obligated and paid a significant portion of the total cost of the ECMs in the first year of the contract. These three case studies used one-time savings to pay down about 7 percent, 38 percent, and 39 percent of contract cycle costs. We believe this shows that opportunities exist to acquire ECMs in smaller, useful segments when technically feasible. The other three case studies are not used to support our conclusion because the up-front payments on these delivery orders stemmed from federal funding unexpectedly made available to mitigate energy shortages in California during fiscal year 2000 or because the up-front payment was minimal. We are not asserting that these opportunities exist in every case but we remain of the view that they should be explored as part of a business case analysis.

14. As stated on pages 35 and 36, we found that GSA and the Navy took an active role in negotiating case study ESPCs to protect the government’s interest. However, the potential for problems has been demonstrated through numerous Army Audit Agency reports issued over the last several years on ESPCs awarded by the Army. These reports stated that energy savings baselines established by the ESCOs were faulty, resulting in overpayments to the ESCO. Accordingly, we believe our conclusion is both warranted and relevant.

Comments from the Department of Energy

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



The Under Secretary of Energy
Washington, DC 20585

October 25, 2004

Susan J. Irving
Director, Federal Budget Analysis
Strategic Issues
Government Accountability Office
Washington, DC 20548

Dear Ms. Irving:

Enclosed are the Department of Energy's comments on the Draft Report entitled "Capital Financing: Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns" (GAO-05-55). The Department appreciates the Government Accountability Office's review of the matters addressed in the Draft Report.

Please contact Dreda Perry of my staff regarding any questions you may have. Ms. Perry can be reached at 202-586-0561 or dreda.perry@ee.doe.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Garman".

David K. Garman
Acting Under Secretary for
Energy, Science and Environment

Enclosure

DOE Comments
On

**Draft GAO Report “Capital Financing: Partnerships and Energy Savings Performance
Contracts Raise Budgeting and Monitoring Concerns” (Sep 2004)**

The Department of Energy (DOE) is grateful to the Government Accountability Office (GAO) for reviewing certain capital financing issues. We appreciate this opportunity to provide comments on the draft report entitled “*Capital Financing: Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns*” (Draft Report).

See comment 1.

The draft report begins by invoking the 1967 Commission on Budget Concepts in faulting DOE's arrangements under which it has acquired (under specific legislative authority) building energy conservation improvements and contract rights to general office space in private construction at Oak Ridge, Tennessee. The draft report seems to posit that these arrangements contravene the 1967 Commission's injunction that "borderline . . . transactions" be included in the President's budget, and that a separate capital budget approach to budgeting be rejected. The "borderline" transactions about which the Commission was actually speaking were the operations of the social security, unemployment, highway, medicare, and civil service retirement trust funds, and their "exclusion . . . from the present [1967] administrative budget[.]" 1967 Comm'n Report at 25 & 26. And as to the Commission's rejection of separate capital budgets, what it faulted was "exclud[ing] outlays for capital goods from the total of budget expenditures," 1967 Comm'n Report at 33, rather than the amount of expenditures (such as those for operating lease legal obligations) actually included in the budget. Nothing in the 1967 Commission's report addressed operating leases such as those at Oak Ridge, and even as to true capital expenditures indicated that such "expenditures" be displayed by an accrual method under which "goods and services acquired under contract, as in construction . . . result in reporting expenditures . . . as the work is actually performed to Government specifications." 1967 Comm'n Report at 39. This element of the 1967 Commission report said nothing at all about recording obligations, let alone calculating them by reference to speculation about the future when no legal obligations have been assumed by an agency.

To briefly summarize our comments, we agree with one of the two recommendations in the Draft Report, and we strongly disagree with the other. DOE agrees with the recommendation that "agencies should perform business case analyses and ensure that the full range of funding alternatives, including the technical feasibility of useful segments, are analyzed when making capital financing decisions." However, DOE strongly disagrees with the recommendation that "the Director of OMB work with scorekeepers to develop a scorekeeping rule that would ensure that funds are obligated to reflect the full commitment of the government, considering the substance of all underlying agreements, when third party financing is employed."

See comment 2.

Fundamentally, the Draft Report does not suggest any serious defects with the current scorekeeping rules, which seem to us to be a thoughtful, carefully developed, well understood, and fairly easily administered set of factors well designed to determine what the "full commitment of the government, considering the substance of . . . underlying agreements" actually is, and to score transactions accordingly. Likewise, the Draft Report does not suggest any specific factors that should be added or substituted. Rather, to the extent that it proposes anything, it seems to be suggesting a "totality of the circumstances" approach that would lead to subjective judgments about "the substance of all underlying agreements" divorced from a list of factors that can be understood and applied to different transactions. Additionally, in the case of Energy Savings Performance Contracts (ESPCs), such a scorekeeping and budgeting rule likely would discourage or prevent agencies from entering into ESPCs, a result that is contrary to statutory authority, good facility management, energy efficiency, and the recently-expressed will of Congress. In the case of public/private alternative financing arrangements, such a scoring rule

See comment 3.

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would not lead to more accurate or more transparent scoring or accounting, and would discourage or prevent agencies from using their statutory authorities to accommodate a myriad of different transactions involving capital assets in a way best suited to advancing the federal government's needs and interests in particular situations.

The Draft Report intermingles two completely separate and distinct alternative financing methods – ESPCs, and the separate mechanism of entering into public/private arrangements that relate to capital assets. We believe that while both ESPCs and public-private arrangements use private sector funding, their inherent differences merit different analyses. To avoid confusion and misapplication of principles, these different mechanisms should be analyzed separately.

ESPCs essentially involve improvements to existing federal assets and are structured to capture energy savings generated through the implementation of energy conservation measures by private sector companies. These projects are relatively small, large in number, exist throughout the federal system, and are specifically authorized under a government-wide, statutory scheme. In fact, only in the last few days, both houses of Congress approved an extension of the authority for government agencies to enter into ESPCs (see footnote 20). Public-private arrangements, on the other hand, are generally larger transactions designed to accomplish particular mission needs. These arrangements are complex, few in number, location-dependent, unique in transactional structure, and require reliance on specific agency legislative authorities. These projects require review by the agencies' executive management, and a determination of best economic value (and course of action) made consistent with the principles of sound financial and budgetary decision making.

Therefore, our comments on the Draft Report will be bifurcated into these two separate topics. A section on public/private arrangements will provide general comments on three major subcomponents -- business case analysis, scorekeeping requirements, and legal interpretation of transactions. The ESPC section will address the Draft Report in light of the legislative history of that program. Specific comments on Draft Report language will be set out in an Appendix.

At the outset, however, we recognize that both of these mechanisms deal with the problem of how agencies manage capital improvements and infrastructure development in an era of limited resources, limited access to appropriations, and growing mission demands. In that context, GAO has detailed the deteriorating condition of the federal real property portfolio in recent reports concluding that the "federal portfolio is in an alarming state of deterioration."¹ Not surprisingly, GAO designated federal real property as a high-risk area requiring executive attention to resolve, noting that the government's current real property practices "...have multibillion-dollar cost

¹ GAO attributes the condition of the portfolio to a number of factors, including: scoring rules that force recognition of the full costs of commitments up-front; the inability of agencies to obtain appropriated funding to maintain and/or acquire mission critical assets due to fiscal constraints; and the lack of reliable and useful data for strategic decision making. See generally, GAO-02-46T, *PUBLIC-PRIVATE PARTNERSHIPS – Factors to Consider When Deliberating Governmental Use as a Real Property Management Tool* (October 2001); GAO-02-622T, *FEDERAL REAL PROPERTY – Views on Real Property Reform Issues* (April 2002); GAO-03-609T, *GENERAL SERVICES ADMINISTRATION – Factors Affecting the Construction and Operating Costs of Federal Buildings* (April 2003); GAO-03-1011, *BUDGET ISSUES – Alternative Approaches to Financing Federal Capital*; and GAO-04-119T, *FEDERAL REAL PROPERTY, Actions Needed to Address Long-Standing and Complex Problems*.

See comment 4.

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implications and can seriously jeopardize mission accomplishment.” DOE agrees with these previous GAO’s assessments.

Comments Related to Public/Private Arrangements Involving Capital Assets

1. Agencies Should Perform Business Case Analyses and Ensure That the Full Range of Funding Alternatives Are Analyzed When Entering Into Public/Private Arrangements Involving Capital Assets

The Office of Management and Budget (OMB) has provided the agencies with a comprehensive framework for conducting the business case analysis. This framework is based on two major OMB Circulars:

1. OMB Circular A-11, *Preparation, Submission and Execution of the Budget; and*
2. OMB Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.*

Circular A-11 provides the agencies executive-level guidance on the planning, budgeting, and acquisition of capital assets, and provides the budgetary scoring rules to be applied to the alternatives in the range. In addition, GAO has issued its *Executive Guide: Leading Practices in Capital Decision-Making*,² which supplements Circular A-11’s *Capital Programming Guide*.³ Together, these documents form the capital asset planning and budgetary foundation for the federal government.

Circular A-94 provides agencies the requirements for conducting a financial analysis of the alternatives in the range. The financial analyses employed by OMB in Circular A-94 are, with minor exceptions, identical to those used in the private sector. Using A-94, agencies calculate the present value life-cycle cost of the alternatives in the range, and, when possible, other values such as net present values, internal rate of return, accounting payback, etc. DOE notes that OMB A-94 discourages the use of operating leases to satisfy long-term needs as operating leases are generally more costly than acquisition.

The business case for any capital investment decision should consider the full range of alternatives. At a minimum, this range should include appropriated funding, private-sector solutions, and continuing the status quo.

DOE agrees with GAO that the agencies should perform a business case analysis of the full range of alternatives, and that this analysis should be used by Executive Management to reach a reasoned business decision. A complete business case analysis considers many factors, including the life-cycle cost of the alternatives, the commitment of the federal government, the federal

² GAO EXECUTIVE GUIDE – *Leading Practices in Capital Decision-Making*, GAO/AIMD-99-32, December 1998, Page 49

³ OMB Circular A-11, Part 7, *Planning, Budgeting, Acquisition, and Management of Capital Assets*, Supplement to Part 7—*Capital Programming Guide*. GAO’s Accounting and Information Management Division provided agencies with its EXECUTIVE GUIDE – *Leading Practices in Capital Decision-Making*, GAO/AIMD-99-32 (December 1998), as a supplement to OMB’s *Capital Programming Guide*.

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government's needs and any uncertainty about future needs, risk borne by the parties, and the likelihood that any particular alternative can be achieved. Costs, while an important part of the analysis, need to be weighed against these other factors by Executive Management.

See comment 5.

DOE agrees that upfront appropriated funding can result in the lowest life-cycle cost to the taxpayer, but recognizes that in many instances third party financing can provide a lowest life cycle cost for a given asset. Nevertheless, for a variety of financial and operational reasons, federal agencies, just like entities in the private sector, do not always want to or need to "acquire" the capital assets that they may need to use for a period of time. For example, there may be many circumstances where the government needs the use of a particular asset for a period of time, but does not anticipate a long-term need for it or cannot ascertain with any degree of certainty whether such a need will continue to exist. In those circumstances, it might be possible in retrospect to say that up-front appropriated funding would have been the least expensive option, but that may not have been clear at the time that advance decisions needed to be made. In short, a reasoned business decision must include all factors, including the feasibility of any particular alternative, to determine the best economic value for an agency when it determines its capital asset needs and budgets.

In its Executive Guide, GAO provides guidance to the agencies for capital investment planning. GAO states:

See comment 6.

From a federal agency's point of view, however, full funding [for capital assets] can be problematic, especially under periods in which budget caps constrain spending.⁴

The federal government's financial outlook has not improved since GAO made this observation. In fact, in numerous reports published since the mid-1990s,⁵ GAO continually questions the feasibility of obtaining appropriations to acquire or service mission critical assets due to fiscal constraints. Current budget projections show that the era of federal budget constraints will continue for years.

See comment 7.

DOE questions why the Draft Report does not include the cost of maintaining the status quo in the range of alternatives in the business case analysis for Executive Management consideration. While the cost of obtaining space through alternative financing may be marginally higher than obtaining space through appropriated funds, the cost of maintaining the status quo is, in many cases, substantially higher. Executive Management must consider these costs, weighing them against the feasibility of obtaining appropriated funds, the risk to the government, and other factors. The Draft Report's exclusion of the status-quo alternative ignores this critical element for Executive Management consideration. Exclusion of this alternative incorrectly limits the choices faced by federal agencies, and understates the range of true costs to the taxpayer.⁶

⁴ Page 49, GAO EXECUTIVE GUIDE – *Leading Practices in Capital Decision-Making*, GAO/AIMD-99-32 (December 1998)

⁵ See footnote 1

⁶ Moreover, in GAO's view, alternative financing arrangements are of concern because higher interest rates and other factors may increase the cost of third-party financing compared to full, up-front budget authority. However, in the draft Report, the GAO repeatedly concedes that it has not fully evaluated the various potential cost savings that may be associated with the use of the alternative financing vehicles profiled in the draft report (see, e.g., pp. 4, 6, 24-25).

See comment 8.
Now on pp. 5, 7, and 31.

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See comment 9.

DOE's Office of Management, Budget, and Evaluation/Chief Financial Officer and Office of General Counsel are currently working on a draft policy statement that will require a business case analysis be prepared for public/private alternative financing arrangements, which would include a cost-comparison analysis based on OMB A-94. This new DOE policy⁷ will, when finalized, put DOE in compliance with GAO's recommendation.

2. The Draft Report's Recommendation to Score Operating Leases as Capital Leases is Inconsistent with Financial Accounting Standards and OMB's Guidelines

See comment 10.
Now on p. 44.

The Draft Report recommends that OMB "work with scorekeepers to develop a scorekeeping rule for the acquisition of capital assets to ensure that the budget reflects the full commitment of the government, considering the substance of all underlying agreements, when third party financing is employed"(Draft Report at 38) [emphasis added]. This recommendation apparently seeks to have budget scorekeepers look beyond current factors set out in OMB Circular A-11 to judge the true "substance" of a transaction in order to capture and require full upfront budget scoring for transactions that now qualify as operating leases and do not require scoring under OMB Circular A-11. GAO apparently believes that implementation of this recommendation would improve budgetary transparency.⁸

This recommendation to score a transaction according to the "substance", as determined by criteria nowhere identified in the Draft Report rather than using the well-established and fairly easily applied factors set out in OMB Circular A-11, is inconsistent with both private-sector and public-sector financial accounting standards.⁹ From a budgetary viewpoint, OMB A-11 is concerned with the government's legal obligations and the actual allocation of risk in transactions, and appropriately requires the full amount of the government's legal obligations to be scored up front. Notably, the OMB A-11 standard for determining whether a lease is a capital or operating lease is more stringent than that used in the private sector. The Draft Report acknowledged that the operating lease resulting from the ORNL third-party financing

⁷ This policy will not apply to ESPC's which are subject to requirements set out in 10 C.F.R. Part 436.30.

⁸ GAO's original concern with operating leases was that agencies were effectively incentivized to choose operating leases in-lieu-of ownership since operating leases were less costly in any given year, as stated in GAO -04-119T, FEDERAL REAL PROPERTY: Actions Needed to Long-Standing and Complex Problems (October 2003). The operating lease that formed the basis for GAO's concern was a standard operating lease without the potential for ownership. GAO has recognized that the current and future fiscal environment will be constrained, and appropriations for general purpose real property will be severely limited.

⁹ OMB has adopted the private sector's financial accounting standard for determining the status of a lease, either capital or operating. The private-sector standard requires that each of four conditions be met; failure of any one of these conditions requires that a lease be considered a capital lease. OMB has added two additional conditions to the private sector standard, ((i) The asset is a general purpose asset rather than being for a special government and is not built to the unique specification of the government as lessee, (ii) there is a private sector market for the asset), resulting in a government standard that is more stringent than that used in the private sector. The private sector (and OMB) standard is based on the legal obligations of the parties. In the private sector this accounting standard protects the shareholder by ensuring disclosure of the full extent of the company's legal obligation. OMB's enhanced standard serves the same purpose for the taxpayers. As an additional test, OMB requires the agencies to assess the degree of risk assumed by the parties to bolster its scoring decision.

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See comment 11.

arrangement met the stringent budgetary standard established by OMB in A-11, and was correctly scored.

See comment 12.

Moreover, the Draft Report's assumption that the ORNL transaction is "really" the acquisition of a capital asset demonstrates the lack of standards and the potential considerations that would be ignored in the approach GAO proposes. In fact, the ORNL transaction allocated risk and costs differently from the way they would have been allocated had it been a true acquisition because it was NOT a true acquisition. Rather, it reflected DOE's decision NOT to acquire a new building at the time it entered into the transaction, in significant measure because DOE did not want to make the commitment of resources to the acquisition of a new building at the time of the transaction because there were genuine uncertainties about the forecast need for the use of these facilities. It did, however, have sufficient interest in a new building to be prepared to make its property available for construction of a building that it could use, and to enter into a year-by-year lease for the building, but subject to its right to terminate the lease should funds prove scarce and other mission needs take priority. DOE's rights and obligations reflected that it was making a more limited commitment that fell well short of an acquisition, and it would not have made sense to score the transaction as if it had been an acquisition.

See comment 13.

If adopted, this recommendation would raise the specter of obstacles to the use of third-party financing arrangements that could readily be interposed on a subjective basis, thereby in practice making these arrangements very difficult to enter into. That would be unfortunate. These arrangements provide the government flexibility to address certain types of challenges associated with the management of its real property in a timely manner while shifting capital and transactional risk to the private sector. Moreover, implementation of the recommendation would mean that budget scoring would impose obligations on agencies and their Executive Management that exceed the actual legal obligations they are incurring through their transactions, thus incorrectly over-stating the obligations that an agency actually has incurred. By severing budget scoring from the allocation of actual legal and economic risk, this GAO recommendation would degrade budget transparency.

See comment 14.

Moreover, the Draft Report's recommendation also is inconsistent with GAO's desire to ensure budgetary transparency while providing greater manager flexibility.¹⁰ Because it does not contain any specific standards, it is hard to see how the Recommendation will promote transparency. And it is clear that it will hinder management flexibility. In the *Executive Guide: Leading Practices in Capital Decision-Making*, GAO encourages agencies to pursue innovative approaches that both balance the need for budgetary control and provide managerial flexibility when funding capital projects. In the past, GAO has recognized the need to bring private-sector solutions to the government's real property management challenges, and GAO has identified a number of innovative approaches for providing the agencies the managerial flexibility necessary to use these approaches. DOE questions the Draft Report's apparent retreat on this issue.

DOE agrees with GAO that Executive Management must consider the full range of alternatives in a business case analysis as dictated by OMB A-94. Accordingly, the present value life-cycle costs of all the alternatives, including appropriations, operating leases, maintaining the status quo, and so on, must be evaluated equivalently. Executive Management's decision, after weighing all

¹⁰ GAO/AIMD-99-32, *Executive Guide: Leading Practices in Capital Decision-Making* (December 1998)

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factors including the feasibility of the alternatives, may result in a determination that the lowest cost alternative does not deliver the best value.

3. The Draft Report Incorrectly Attempts to “Looks Beyond” the Oak Ridge Transaction Documents to Make a Subjective and Non-Legal Judgment That the Transaction Should be Categorized and Scored As a Capital Lease Under OMB Circular A-11.

The Draft Report characterizes the arrangement at Oak Ridge National Laboratory (ORNL) as a transaction in which the legal instruments created operating leases, but underlying factors led GAO to believe that the commitment was really a long term obligation of the federal government and that the scorekeeping rules should be changed to score such operating leases as capital leases. In essence, GAO is recommending that OMB “go beyond” the legal instruments (and the actual legal and business obligations) of the third party financing arrangements and go beyond Circular A-11 factors which substantiate scoring as an operating lease, to find the existence of a capital lease. GAO suggests “going beyond the strict terms of a proposed transaction and scoring based on the substance of the deal,” (Draft Report at 36), without specifying what factors or weighting might be appropriate to use in determining that “substance.”¹¹

The Draft Report and its conclusions reflect a fundamental misunderstanding of the ORNL transaction and the operating lease that was the subject of the OMB analysis. The report ignores both the legal structure and the underlying economic substance of the operating lease at ORNL, and substantially departs from well-accepted methods of budget scoring and of private sector accounting. The Draft Report and its recommendations to OMB represent a misplaced shift in emphasis in determining budgetary treatment of alternatively financed transactions from the risk-based analysis of OMB Circular A-11, that focuses on assessing the government’s actual obligations or commitments and the actual allocation of risk between the public and private sector, to a conclusory and speculative emphasis on whether the transactions involve long-term governmental needs (Draft Report at 2).

In fact, the ORNL transaction was deliberately structured so as not to commit the government to purchasing a capital asset, in substantial part, at least, for business reasons: DOE was not sure, in light of evolving mission needs, whether it actually wanted to buy three new buildings at the time it authorized the transaction. Accordingly, its business needs were better met by renting the buildings. Therefore, the transaction is set up so that it is the private sector developer and its backers – not DOE – that bear the financial risk that DOE will not use the buildings long-term by making DOE’s only obligation a sublease terminable at DOE’s option with one-year’s notice. DOE and its Management and Operating (M&O) contractor have the specific right for any reason whatsoever to terminate use of the new facilities with only one year’s notice. Accordingly, DOE (and its contractor) are only committed for a term of one year. Therefore, DOE’s risk is limited to one year’s rent, related expenses, and the value of 6.6 acres of land. The public offering

¹¹ It is not beyond the realm of possibility that there could be additional factors that may bear on this question beyond those identified in Circular A-11, although DOE believes the Circular’s current factors are appropriate and work well. The Draft Report, however, makes no attempt to delineate what such underlying factors might be, or how they should be viewed for scorekeeping purposes. DOE believes it is important that any list of factors be few in number, be objective, and be easily understood and administered, as is the case now. In any event, DOE believes the reality of the ORNL transaction was well captured by the current list of factors, and that it is in fact properly understood as an operating lease.

See comment 15.
Now on p. 42.

See comment 16.
Now on p. 3.

See comment 17.

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See comment 18
Now on p. 23.

materials fully disclosed the one-year termination provision and the full one-point increase in the interest rate on the public offering after the events of September 11, 2001, reflected the market's understanding of the transaction. Further reflecting the actual allocation of risk is the fact that there were reserve funds established by the private-sector Bond Trustee to cover any shortfall in rent beyond the one-year period in the event of termination.¹² Although the Draft Report cites a series of factors that make it unlikely that DOE will exercise the option to terminate the lease, the Draft Report's analysis depends on a series of possibilities that may or may not come to pass (e.g. "ORNL's Project Manager told us that, even if ORNL's mission was downsized, it was unlikely that DOE would terminate any of the leases of the three new, state-of-the art buildings to reoccupy the now empty, dilapidated buildings," Draft Report at 17), but the risk of which DOE deliberately chose not to bear. In that connection, it would be well not to forget that DOE terminated the Super Collider and the Clinch River Breeder Reactor projects even after a very substantial direct investment had been made by the government for which there was little commercial market.

See comment 19.

In short, it is a legal absolute that under the subleases, with one year's notice, DOE is completely free of any further obligation to use or pay for the new facilities, and that the termination provision served a legitimate business purpose of DOE's. Only by ignoring this key provision, as well as the legitimate business purpose for this provision, can GAO assert that there is something wrong with the way the transaction was scored, even while admitting that it was properly scored under current scoring rules. Neither GAO's recommendations, nor budget scorekeeping rules, should be based on non-legal speculation about what an agency may or may not do in the future, or the exercise of subjective judgment "based on the substance of the deal" that ignores the federal government's clear legal rights, obligations and actual risks arising from the transaction at issue.

Comments on the Draft Report's Analysis of ESPC's,

The Draft Report's Conclusions Concerning the Budgetary Treatment of "Long Term Obligations" Under ESPCs Does Not Reflect the Congressional Intent For Which the ESPC Legislation Was Enacted and Continued.

See comment 20.

The GAO premise in the Draft Report is to analyze ESPCs from a traditional government contracts perspective as an acquisition of an asset, and that the agency somehow needs to score as budget authority the whole multi-year term obligation under the contract. This view is misplaced at best, and at worst would result in nullifying the Congressional purposes that the law was enacted to accomplish. The ESPC mechanism was intended by Congress and the Executive Branch to be the primary tool for the federal government to reduce energy consumption at federal

See comment 21.
Now on pp. 23 and 38.

¹² The Draft Report cites Standard and Poor's A+ rating of the ORNL bond issuance, pointing to "a strong lease revenue stream from DOE, for a period of up to 25 years," that "would be pledged as security for the payment of the bonds." Draft Report at 17 (emphasis added). In fact, DOE did *not* pledge this stream and was not a party to the issuance of the bonds. Rather, UT-Battelle, UTBDC, and Keenan Developers executed an assignment of rents they might receive to the Bond Trustee, but those rents remain subject to the one-year termination clause, to the extent they have as their source potential payments from DOE. The Draft Report also fails to note the participation of independent, outside directors on the Board of the Development Corporation and in the chart on page 31, appears to incorrectly suggest that the Development Corporation supplied financing for this project directly to DOE.

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facilities and meet mandated energy savings goals.¹³ We oppose the use of administrative budget scoring processes to negate the Congressional objective of promoting energy conservation through the use of ESPCs. A summary of the legislative history of this mechanism would be helpful in explaining the errors in the Draft Report's analysis.

First authorized in 1985,¹⁴ the unique ESPC long-term, contracting mechanism was instituted by Congress to reduce energy consumption at federal facilities. Under this mechanism Congress authorized agencies to enter into up to 25-year arrangements with private sector energy service companies in which the private sector company would both install energy-efficient equipment and provide energy-management services at federal sites for the purpose of implementing energy conservation measures (ECM) at those sites. Congress recognized the unique nature of these arrangements by exempting these contracts from the Anti-Deficiency Act and allowing these private-sector energy service companies to install their own energy-efficient measures into federal facilities "at no-cost to the federal customer" under which the private company "risks its own capital in return for a share of value of the energy savings resulting from the improvements" without the need to obligate total contract costs up-front.¹⁵ In that context, it is a misnomer for GAO to assert that ESPCs are being used by agencies for the purpose of *acquiring* an asset.

To encourage greater use of this mechanism, Congress, in 1992,¹⁶ provided expanded authority for energy savings projects. In recognizing the unique budgetary treatment of ESPCs,¹⁷ the House and Senate conferees on the Energy Policy Act of 1992 stated:

*Energy savings performance contracts are a mechanism through which private sector funds can finance Federal energy efficiency improvements. The Conferees recognize that these contracts differ significantly from traditional Federal procurement contracts. Under these contracts, the contractor is expected to bear the risk of performance, make significant capital investment, guarantee significant energy savings to the government agency, and from these savings the agency, in effect, makes payment to the contractor.*¹⁸

Congress specifically intended that these capital improvements were not to be funded up-front by the federal government; rather the risks of financing and performance were to be borne by the private sector. The federal obligation would only attach to energy savings actually incurred on an annual basis by the contractor's "guaranteed" energy savings. The agency only obligates its annual appropriation (otherwise provided for utility acquisition or building maintenance) when it

¹³ Executive Order 13123 (June 8, 1998) "Federal Efficient Energy Management". The federal government is mandated to achieve energy savings performance requirements for federal buildings. 42 U.S.C. § 8253. Even higher energy conservation goals for federal buildings were imposed under Executive Order 13123.

¹⁴ Pub. L. No. 99-272 (1985), codified at 42 U.S.C. § 8287.

¹⁵ H.Rep. No. 99-453, 99TH Cong., 1ST Sess. at 441-443 (1985) (Comm. On Conference). The Conferees stated that this mechanism would:

"[A]llow the Federal government to enter into long term contracts, not to exceed twenty-five years, *without the necessity of obligating the total cost of the contract, including termination cost at the time of contract award.*" Id. (emphasis added)

¹⁶ Section 155 of Pub. L. No 102-486 (1992) (Energy Policy Act of 1992) codified at 42 U.S.C. § 8287.

¹⁷ The 1985 Act referred to the contracts as "Shared Energy Savings Contracts." The 1992 amendments changed the name of these contracts to "Energy Savings Performance Contracts."

¹⁸ H.Rep. No 102-1018, 385 (1992) (conference committee), reprinted in 1992 U.S.C.C.A.N. 2476

See comment 22.

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makes payment to the contractor to the extent that savings actually arise from the contractor's performance.

Moreover, Congress, in reauthorizing ESPC authority through FY 2006 (in the Ronald W. Reagan National Defense Authorization Act for FY 2005),¹⁹ was concerned that this contracting mechanism was being underutilized by the federal government. Therefore, Congress broadened the allowable scope of these contracts and imposed a requirement on DOE to implement administrative changes to "increase [ESPC] program flexibility and effectiveness."²⁰ This Congressional concern runs counter to the Draft Report's recommendation that this method of contracting should be constrained (if not eliminated entirely) by requiring full, up-front, budget recording of all potential obligations under the multi-year term of the contract. This would, in effect, cripple the ability of the federal government to make needed capital improvements to meet the energy savings goals imposed by Congress, and completely misses the fact that the financial risks of this type of contracting are borne by the private sector and not the federal government.

In addition, the Draft Report analysis concludes that obtaining up-front appropriations for these improvements would be less costly, and therefore preferable, to ESPCs. This conclusion does not reflect the realities of the agency budget and Congressional appropriation processes, especially when the appropriation process is compared to the timing needs of the improvements and to the extent and scope of hundreds of energy conservation projects throughout the federal infrastructure. Furthermore, it seems to mistakenly assume that in each case in which an ESPC agreement and resulting improvements exist, the relevant agency would seek the necessary appropriation, obtain it from Congress, and implement the energy conservation measure. Again, this assumption has no basis in reality. Waiting first to see if appropriations can be obtained for each project before proceeding under the ESPC process will cause serious, costly, and irreparable harm to federal energy and infrastructure goals and would not save money or energy. This would be an impractical and counterintuitive approach, and contrary to GAO's own findings that federal infrastructure deterioration is fast becoming a high-risk area in crisis.²¹ It is virtually certain that this approach would result in fewer energy efficiency improvements, fewer energy conservation measures, and foregone energy savings. The ESPC authority is available as a creative, practical, and timely method to assist the government in stemming this deterioration and promoting energy conservation.

¹⁹ Pub. L. No. _____, [not yet signed by President]

²⁰ Section 1090(f) of Pub. L. No. _____, [not yet signed by President] "Not later than 180 days after the date of the enactment of this Act, the Secretary of Energy shall complete a review of the Energy Savings Performance Contract program to identify statutory, regulatory, and administrative obstacles that prevent Federal agencies from fully utilizing the program. In addition, this review shall identify all areas for increasing program flexibility and effectiveness, including audit and measurement verification requirements, accounting for energy use in determining savings, contracting requirements, including the identification of additional qualified contractors, and energy efficiency services covered. The Secretary shall report these findings to Congress and shall implement identified administrative and regulatory changes to increase program flexibility and effectiveness to the extent that such changes are consistent with statutory authority."

²¹ GAO-04-119T (Oct. 1, 2003) "Federal Real Property - Actions Needed to Address Long-standing and Complex Problems"

See comment 23.

See comment 24.

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DOE Comments on Specific Draft Report Language

Discussion of the Oak Ridge Transaction

1. **The UT-Battelle modernization program implemented through funding by the State of Tennessee and by alternative financing did not constitute an acquisition by the federal government of capital assets.** DOE has not acquired any of the assets that were the subject of the Oak Ridge transaction. At the end of 25 years, depending upon the intervening circumstances, it may acquire them. The risk for the venture, other than the cost of the land, is borne entirely by the bond investors and private parties.
2. **The UT-Battelle alternative financing approach did not result in a partnership with DOE.** The UT-Battelle project does not meet the definition of a "partnership" as defined in the draft report or in the August 2003 GAO report cited in the draft. As stated on page 6, last paragraph, partnerships generally entail a government agency "engaging a third party to, among other things, renovate, construct, operate, or maintain a public facility." DOE did not engage UT-Battelle to construct the three buildings, and those buildings are not "public facilities." However, the draft report repeatedly cites the existence of such a partnership as related to the UT-Battelle project, most noticeably with the first statement on page 70. DOE's role was no more than transferring a 6.6 acre parcel of land. UT-Battelle requested the land transfer from DOE. Subsequently, DOE authorized UT-Battelle to enter into a real estate lease for space, a routine act that is performed on multiple occasions by UT-Battelle in the past four years. As shown by the August 2000 letter from Dr. Madia to Mr. Malosh, and as approved by DOE in March 2001, DOE was not the initiator of this project. A partnership as defined in the August 2003 GAO report may well exist for the other projects reviewed in the report, but does not exist for the UT-Battelle project.
3. **The UT-Battelle subleases do not violate the 75% rule. The three facilities constructed and subleased to UT-Battelle are subject to a ten year sublease with three five year options.** Assuming that all of the options are exercised, the sublease will end after 25 years. The buildings have an estimated economic useful life of no less than 39 years, and as evidenced by the existing facilities at ORNL, will likely be used for more than 50 years. Thus, the 25 year lease with options could not exceed 75% of the expected useful life of the facilities. GAO's prediction that "[i]t seems unlikely that the agencies will vacate or abandon these assets before the end of their economically useful lives, thus exceeding the 75 percent criteria for an operating lease" invents an entirely new theory of the 75% rule, under which compliance would be measured not by legal rights and obligations under the lease as actually entered into, but by someone's subjective prediction about what one of the parties is likely to do. This would turn the 75% rule on its head.

See comment 25.

See comment 26.
Now on pp. 76 and 78.

See comment 27.

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See comment 28.
Now on pp. 41 and 42.

See comment 29.
Now on p. 40.

See comment 30.
Now on p. 40.

See comment 31.
Now on pp. 8 and 37.

See comment 32.
Now on pp. 23.

4. **The UT-Battelle transaction did not “establish [a] long term commitment[] of the government,”** contrary to the assertion on p. 36 that all the transactions studied in the Draft Report established such commitments.
5. **Purpose of Transaction.** On p. 34 the Draft Report asserts that the ORNL transaction was undertaken “to obtain project financing.” That misunderstands the transaction. The transaction was undertaken fundamentally because UT-Battelle suggested it as a means by which DOE could obtain something of value to it – use of a new building on property convenient to it that it might eventually decide to buy – without having to commit to buying the building at the time of the transaction.
6. **Reference to DOE legal opinion.** The last sentence on page 34 references a memorandum issued by DOE’s general counsel. The DOE legal opinion that was issued by the Assistant General Counsel for General Law dealt with whether the lease was an operating lease. The purpose of the opinion was not to address the issue for which the Draft Report cites it.
7. **The draft report suggests a conflict of interest and potential for fraud or wrongdoing in the UT-Battelle project.** On pages 7 and 30, the draft report suggests a conflict of interest existed between UT-Battelle and UT-Battelle Development Corporation (UTBDC), and the dealing of the two entities with DOE. Obviously, there are overlapping interests between UT-Battelle and UTBDC. Therefore efforts were made to reassure DOE that neither UT-Battelle, its two owners (the University of Tennessee and Battelle Memorial Institute), nor UTBDC would gain any financial advantage from this arrangement. The DOE Certified Realty Officer approved the lease as being consistent with market value for comparable facilities in the Oak Ridge/Knoxville area. UTBDC and DOE agreed that UTBDC would simply pass on to UT-Battelle the lease costs imposed on UTBDC through the Facility Leases from Keenan Developers of Tennessee. UTBDC incurred costs exceeding two million dollars for the project for which it has not been reimbursed by DOE. UT-Battelle is a non-profit LLC, and UTBDC is a tax-exempt entity under the rules of the Internal Revenue Code. Both undergo annual audits by an independent auditing firm.

Specific Comments on Draft Report’s Discussions of ESPCs

1. *Throughout the report, GAO notes that there is insufficient data to measure the effect of delayed appropriations on foregone energy and maintenance savings. See, e.g., Draft Report at 25-26.*

Response: GAO has drawn its conclusions and recommendations based on examining 6 ESPC projects, zero direct-funded projects, and an analysis based on the assumption that operating projects can be achieved either way in the same amount of time. The ORNL study examined 71 ESPC projects finding, on average, 28 months to an operating project; and 12 direct-funded projects finding, on average, 63 months to an operating project. Throughout the Draft Report, GAO has based its recommendations and conclusions on inadequate analysis and insufficient data.

Additional information on delays between initial requests and eventual receipt of direct funding for energy efficiency projects is needed to support a realistic assumption about how

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See comment 33.

long agencies wait for energy efficiency project direct funding. There is no evidence that GAO attempted to gather data from OMB and agencies on such things as 1) the amount of direct funding requested by facilities organizations within agencies for energy efficiency projects annually in recent years compared to such requests that made it into the overall agency requests; 2) requests for the Office of Energy Efficiency and Renewable Energy (EE) project direct funding in overall agency requests that cleared OMB and were included in agency requests to Congress; and 3) requests to Congress for EE project direct funding compared to appropriations actually received.

2. Page 6, second sentence: "Also, for our ESPC case studies, the government likely incurred additional costs for the M&V."

See comment 34.
Now on p. 7.

Response: Measurement and verification ("M&V") does result in additional costs. M&V is a best practice that should be performed at a practical level regardless of how a project is funded. Thus, to be balanced, the lack of M&V to protect the government should be cited as a weakness in appropriated projects as often as the cost of M&V in ESPCs is projected as a detriment.

3. Page 2, 1st paragraph, last sentence. "Agencies receive the same program benefits regardless of the financing approach used, assuming they purchase the same capital equipment." Page 12, second paragraph, first sentence: "Critics of ESPCs, however, point out that direct purchase of more efficient energy systems would allow all future savings to accrue to the government, rather than paying out a percentage of the savings to private contractors."

See comment 35.
Now on p. 16.

Response: Implicit in GAO's analysis is the assumption that buying an energy conservation measure and placing it into service, whether through direct funding or ESPC, results in the same benefits over service life. This assumption is wrong. Without M&V, problems go undetected, equipment is not maintained as well and savings decay. Costs of M&V should not be counted against an ESPC, unless the same costs also are counted against direct-funded projects.

4. Page 11, second paragraph, last sentence: "Consequently, no increase in appropriations is required."

See comment 36.
Now on p. 15.

Response: GAO is correct; with ESPCs no increase in appropriations is required. When we consider budget outlays for both capital and energy and related operating expenses, ESPCs are revenue neutral.

5. GAO notes that "for our six ESPC case studies, the government's costs of acquiring assets increased 8 to 56 percent by using ESPCs rather than full up-front appropriations."

See comment 37.

Response: This assertion appears to be based on incomplete data. We would like to work with GAO to review its analytical approach to ensure its adequacy, which is unclear at this time.

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See comment 38.

In the meantime we have used our analysis to compare ESPCs to direct funding for the six projects. The "best case" for direct funding was defined as follows: operating projects are achieved as quickly as with ESPCs, they are financed by the Treasury, and they bear no survey/study or M&V cost adders to project cost. Rather than charge M&V costs to ESPCs, yet claim direct-funded projects with no M&V achieve the same savings benefits over the long-term, as GAO did, our analysis drops M&V costs from ESPCs as well. For consistency and transparency, our spreadsheet was used to calculate the present value of costs for the ESPC and direct funding best cases and the maximum possible % increase in PV costs attributable to ESPC was calculated relative to the direct funding "best case." The following table provides a summary comparison of GAO's analysis and our analysis.

Agency Site	GAO's Estimate Of % Increase In PV Cost Of ECMs Financed Through ESPCs Over Cost If Direct Funded	Maximum Possible % Increase In PV Cost Of ECMs Financed Through ESPCs Over Cost If Direct Funded
Navy Region Southwest	8%	12%
Patuxent River NAS	33%	13%
Naval Submarine Base Bangor	23%	4%
GSA Gulfport, MS	56%	26%
GSA North Carolina Sites	39%	12%
GSA Atlanta, GA Sites	27%	16%

GAO's estimates of percent increases in energy conservation measure costs with ESPCs exceed the maximum possible percent increases calculated based on "best case" assumptions for direct funding. With real world assumptions for direct funding (projects bear realistic adders for survey/study costs, delays, etc.) ECM costs may or may not be greater when ESPCs are used.

6. *Page 16. Section heading: "ESPC Commitments Are Not Fully Recognized Up-Front in the Budget".*

See comment 39.
 Now on p. 21.

Response: ESPC commitments are already recognized in the budget because a facility's operating expenses are recognized in the budget. Therefore, the budget already recognizes ESPC commitments because they are satisfied from savings to operating expense budgets. ESPCs also have guarantees and contractual recourse -- should savings fall short, the government can demand a cure and withhold payments in the meantime. Recognizing ESPC commitments again up-front would be double counting.

7. *Page 22. "As shown in Figure 6, for all six ESPC case studies, contract cycle energy cost savings specified by the contractor did not fully cover total contract cycle costs because agencies made up-front payments".*

See comment 40.
 Now on p. 30.

Response: The avoided costs are true savings and should be shown.

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8. *Page 24, second sentence "ESPCs contain assumptions for such things as hours of operation and ECM efficiency which, taken together, determine estimated savings. However, if the assumptions are incorrect and estimated savings are not achieved, the agency is still required by contract to pay the ESCO the agreed-upon savings specified in the ESPC."*

Response: While it is true that contracted ECM cost savings may differ from actual ECM cost savings in a given year (because, for example, the weather was not typical or energy rates were not as forecasted), the fact remains that the government has remedies against the relevant contractor (the ESCO) if the verified contracted cost savings do not match or exceed the guaranteed cost savings each year. When appropriate assumptions and choices are made, annual contracted and actual savings will be reasonably similar, and over the contract term contracted and actual savings tend to converge. The alternative to using simplifying assumptions for the purpose of calculating savings — having the ESCO take the risk that factors such as the weather, future energy rates, and the government's own operating hours and non-project-related loads will affect savings — would be a poor and expensive choice for the government. Direct funded projects are the ones where the government pays no matter what (upon acceptance), and owns future problems.

9. *Page 26, first sentence: "Since the agencies did not request additional appropriations or adjust their plans to accommodate needed capital investments, it cannot be known whether agencies were correct in assuming that timely appropriations would not be available".*

Response: Agencies make rational decisions based on their past experience. GAO fails to acknowledge the past experience of these agencies, which provides the basis for estimating average wait-times for appropriations, and average costs incurred (in the form of surveys and studies) for requesting appropriated funds. For its 2003 study, ORNL examined 12 direct-funded projects finding, on average, 63 months to an operating project. For its 1993 investigative report on the In-House Energy Management Program (DOE/IG-0317), the DOE Inspector General examined 93 direct-funded projects finding, on average, 73 months to an operating project. About all that can be said based on available information is that ESPCs can achieve operating projects in 28 months on average, and while individual agency experience may vary, direct funding generally takes considerably longer, if it happens at all.

10. *Page 29, last sentence, "Employing best practices in using ESPCs also may provide opportunities to better ensure the government receives the best value for its investment."*

Response: DOE agrees that employing best practices and using available government-side expertise is important with ESPCs and with the preceding sentences that describe the importance of DOE FEMP/agency in-house technical assistance on projects.

11. *Page 32, section title "Large Buydowns of Principal Raise Questions About the Need for ESPC Financing".*

Response: Agencies partnered with contractors and developed ESPCs, which take on average 15 months from kickoff to award and another 13 months to become operating projects accepted by the government. During the 15-month window, agencies make the best

See comment 41.
Now on p. 29.

See comment 42.
Now on p. 32.

See comment 43.
Now on p. 39.

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value choice and minimize financing costs by applying available funds as a pre-performance period payment (P4) to reduce financing costs over term. Borrowing from GAO's own case studies, the Office of the Secretary of Defense used a supplemental appropriation in 2001 to help offset the cost of energy projects on the Western power grid, in an effort to address the energy supply shortages in the West. So Navy Region Southwest and Naval Submarine Base Bangor WA applied P4 payments from these funds of \$6.9M and \$1M respectively on their ESPCs to reduce financing costs. If these sites had done nothing while waiting for appropriations, the project development cycle would have started rather than ended in 2001 and nothing would have been placed in the ground fast enough to address the temporary energy supply shortages.

12. *GAO's ESPC case study analysis in Appendix II assumes it costs agencies nothing to request and receive appropriations for energy efficiency projects.*

Response: Agencies must spend funds on surveys and studies to define projects in order to request direct funding for them. Sometimes surveys and studies fail to find cost-effective projects to recommend. When projects are found, they are often not funded in the first year, updating requests year-to-year involves additional cost, and some recommended projects are never funded. For its 2003 study, ORNL examined 12 direct-funded projects finding, on average, that survey/study costs equaled 25% of project costs. For its 1993 investigative report on the In-House Energy Management Program (DOE/IG-0317), the DOE Inspector General examined \$121.7 million worth of direct-funded projects over 7 years finding, on average, that survey/study costs equaled 14% of project costs. GAO's recommendation of elaborate business case analyses would further increase these costs. Yet in the Appendix II case studies, GAO assumes agencies incur zero costs to secure direct funding.

13. *Appendix II, page 44 - appropriations cannot achieve operating projects on the same schedule as ESPC, and energy and maintenance cost savings are foregone in the meantime.*

Response: GAO's assumptions should include lost savings from delays. It is inconsistent to charge M&V costs to ESPCs, yet claim direct-funded projects with no M&V achieve the same savings benefits over the long-term. The avoided costs, which are the source of what GAO refers to as buy-downs, are true savings that have been left out of the analysis. ESPCs are revenue neutral, as the GAO report correctly notes on page 11. Why do the case studies not show this?

See comment 44.

See comment 45.
Now on p. 54.

The following are GAO's comments on the Department of Energy's letter dated October 25, 2004.

GAO's Comments

1. Our report does not state that the 1967 Commission on Budget Concepts explicitly addressed operating leases such as those at Oak Ridge. As stated, the budgetary principle advanced by the 1967 Commission on Budget Concepts is that the federal budget should be as comprehensive as possible; that is, all activities of the federal government should be shown within a unified budget. GAO has long supported an inclusive budget that discloses up-front the full commitments of the government.
2. Ensuring that the full commitment of the government is recognized in the budget will provide greater transparency for effective congressional and public oversight. Moreover, it ensures that decision makers have the information needed to make the trade-offs inherent in allocating resources among competing demands. Further, this report recognizes the difficulty in ensuring the validity of agencies' long-term plans, but scoring that is based on the substance of a transaction could result in a better reflection of the government's full commitment.
3. It is not the intent of this report to discourage or to eliminate energy conservation efforts or partnerships with the private sector. Given recent congressional action to extend ESPC authority through fiscal year 2006, we have revised our draft to recommend that OMB require, and suggest that Congress consider requiring agencies that use ESPCs to present to Congress an analysis comparing total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs. However, recognizing the full commitment up-front in the budget enhances transparency and enables decision makers to make appropriate resource allocation choices among competing demands that all have their full costs recorded in the budget.
4. In our August 2003 report (*Budget Issues: Alternative Approaches to Finance Federal Capital*, GAO-03-1011) we identified 10 capital financing approaches that have been used by federal agencies to finance capital. Subsequently, as requested by the Senate Chairman, Committee on the Budget, we analyzed in greater detail two examples of these alternative approaches: public/private partnerships and Energy Savings Performance Contracts. Although this report includes our

findings both on ESPCs and partnerships, our analysis of these two financing mechanisms was prepared separately and considered the unique circumstances of each case study.

5. Financing asset acquisition through the United States Treasury always has a lower interest cost than third-party financing. We looked only at acquisitions because we recognize that if the need for an asset is short-term, the government would not need to acquire it. Also, see comment 2.
6. In a constrained budget environment, agencies need to prioritize their projects needing resources and request funds for those of the highest priority. The excerpt DOE cites from our 1998 Executive Guide recognizes—as we do on page 2 of this report—that from an agency’s point of view the ability to record acquisition costs of a capital asset over the life of that asset can be very attractive. However, from the point of view of the government as a whole, these provisions may increase costs. It is the Congress’ role to allocate resources across agencies. The same paragraph cited by DOE further states, “some strategies currently exist at the federal level that allow agencies a certain amount of flexibility in funding capital projects without a loss of fiscal control. These strategies include budgeting for stand-alone stages....”
7. Our report does not suggest excluding the status quo from consideration when agencies evaluate the full range of alternatives in business case analyses. Our focus is on acquisition costs and whether or not alternative financing arrangements increase or decrease the total cost of capital acquisition. We do not question agencies’ decisions to acquire assets and assume that the same assets would be acquired regardless of how they are financed.
8. DOE and VA officials have stated that lower labor costs and fewer bureaucratic requirements could make partnership financing overall less expensive than financing through full, up-front appropriations. Despite this assertion officials were not able to provide documentation to support these claims. DOE contractors did provide a cost-benefit analyses for the financing arrangement at ORNL; however, it was inconclusive because the analyses compared private financing versus receiving federal appropriations over a 10-year period and did not compare receiving full, up-front appropriations.

9. We commend DOE on drafting a policy that will require a business case analysis for public/private partnerships.
10. As we have testified and reported in the past,¹ we believe the budget should reflect the full commitment of the government, considering the substance of all underlying agreements, when third-party financing is employed. According to OMB staff, some of the partnerships we reviewed may have been scored differently under the revised A-11 guidelines. However, even given the 2003 revisions, we believe the scorekeeping rules should continue to be refined to ensure that the full commitment of the government is considered in the budget. In its comments on our draft report, OMB agreed in concept with this recommendation and stated that reflecting the full commitment of the government has always been its goal.

In our conclusions, we discuss agencies' long-term capital plans as indicative of their long-term capital requirements and as useful in determining the substance of underlying agreements to obtain capital. We recommend that the scorekeepers develop rules that would include consideration of these plans. We recognize that ensuring the validity of such plans may pose implementation challenges such as the need to validate agencies' long-term capital requirements.

11. The report has been changed to indicate the partnership was scored according to OMB's interpretation.
12. We recognize that DOE did not purchase the three privately financed buildings at ORNL. However, the buildings were clearly constructed for DOE's benefit and we do not believe it likely DOE would abandon these state-of-the art buildings to reoccupy the currently dilapidated buildings.
13. See comments 3 and 10. We disagree with DOE about whether only the legal commitment should be reflected in the budget or whether the underlying substance of the deal should be reflected.

¹GAO, *High-Risk Series: Federal Real Property*, GAO-03-122 (Washington, D.C.: Jan. 2003); *Public Buildings: Budget Scorekeeping Prompts Difficult Decisions*, GAO/T-AIMD-GGD-94-43 (Washington, D.C.: Oct. 28, 1993); and *Budget Issues: Budget Scorekeeping for Acquisition of Federal Buildings*, GAO/T-AIMD-94-189 (Washington, D.C.: Sept. 20, 1994).

14. As discussed throughout our report, we believe up-front recognition of the full cost enhances budget transparency. Further, we believe the specific standards to be incorporated in any change in scorekeeping guidelines would most appropriately be established by the scorekeepers. Consideration of the substance of all underlying agreements should be part of any specific standards, as we recommend.
15. GAO suggests that agencies' long-term capital plans be considered in determining the substance of the underlying agreement.
16. We fully understand that the ORNL transactions were deliberately structured to be considered operating leases. As is clear from DOE's earlier comments, we simply disagree with DOE about whether only the legal commitment should be reflected in the budget or the underlying substance of the deal. During our review DOE and UT-Battelle, LLC, officials reviewed and agreed with our description of the ORNL transaction included as figure 12, "Partnerships and Financing of ORNL's Revitalization."
17. Standard and Poor's A+ bond rating analysis explicitly discussed "a strong lease revenue stream" from DOE for a period up to 25 years and that the trustee would have a valid security interest in the rent stream." Therefore, the private sector clearly viewed this as a long-term commitment by DOE.
18. See comment 16. Also, neither DOE nor its contractors provided GAO with documentation to support its assertion that reserve funds were established by the private sector Bond Trustee to cover any shortfall in rent beyond the 1-year period in the event of termination. Additionally, Standard and Poor's bond rating did not state reserve funds were established to cover any shortfall in rent beyond the 1-year period in the event of termination. Rather, it cites a "debt service reserve fund equal to one month's base rent."
19. See comments 14 and 15.
20. Our report did not seek to analyze ESPCs from a traditional government contracts perspective. Our report does analyze ESPCs and partnerships from a budget scorekeeping perspective. Also, see comment 3.

21. Whether or not Standard and Poor's was correct in citing that DOE had pledged a lease revenue stream as security for the payment of the bonds, such a statement could have affected bond investors' decisions to purchase. Furthermore, clearly the private sector considered the substance of the underlying agreements in making this assessment. We have clarified in figure 7 that the Development Corporation arranged for the private financing which, as shown in figure 12, was secured by Keenan Development Associates of TN, LLC, through Banc of America.
22. All of our six ESPC case studies paid more to obtain energy conservation measures through ESPCs than they would have paid through full, up-front appropriations. Given FEMP's assertions that 18 federal agencies and departments have implemented ESPC projects worth \$1.7 billion, we believe that "no cost to federal customers" is a misnomer. Furthermore, agencies do acquire assets through ESPCs. As stated in FEMP guidance, ownership of the asset usually transfers from the ESCO to the agency when the equipment has been installed and accepted and after initial confirmation of the guaranteed savings. Nonetheless, given recent congressional action to extend ESPC authority through fiscal year 2006, we have revised our draft such that ESPCs have been deleted from the first recommendation. Instead, we have suggested that Congress should consider requiring agencies that use ESPCs to present to Congress an analysis comparing total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs.
23. Given the mandates to reduce energy consumption, we do not believe the ability of the government to invest in needed capital improvements would be crippled by the requirement to recognize costs up front in the budget. Congress can decide what constitutes priority claims on resources. Also see comment 3 and 22.
24. We acknowledge that waiting for funds to be appropriated may result in opportunity costs. However, DOE did not provide sufficient documentation to support its assertion that waiting for appropriations before proceeding with the ESPC process will cause serious, costly, and irreparable harm to federal energy and infrastructure goals. As stated in our report, we recommend to the heads of case study agencies, including DOE, that business case analyses be performed and that the full range of funding alternatives be analyzed. Such an analysis could include the effect of not obtaining timely appropriations.

25. Our report does not state that DOE acquired any of the assets that were the subject of the Oak Ridge transaction, nor did our analyses look at UT-Battelle's modernization program implemented through the State of Tennessee. Rather our report states that DOE used existing law to structure a partnership that enabled it to obtain the long-term use of facilities that was arranged through private financing.
26. Our report takes a broad definition of partnerships. Also, we specifically identified the transactions at Oak Ridge National Laboratory as an example of a public/private partnership in our report, *Budget Issues: Alternative Approaches to Finance Federal Capital*, GAO-03-1011 (Washington, D.C.: Aug. 21, 2003), pages 5, 48, and 52-53.
27. We clarified our report to remove any implication that the 75 percent criteria for operating leases was violated.
28. We disagree. Our draft report states the financing approaches used in many of the case studies were structured to include features that do not require up-front budget recognition even though they established long-term commitments of the government. As stated in our report, UTBDC implemented subleases of three facilities to UT-Battelle, LLC, for DOE's ultimate use, each with a lease term of up to 25 years.
29. According to a UT-Battelle, LLC, official, UTBDC was created for the purpose of securing private financing. Thus, our report does assert that the ORNL transaction was undertaken to obtain private financing. We do not see this as inconsistent with DOE's comment that the "transaction was undertaken...as a means by which DOE could obtain something of value to it—the use of a new building."
30. References to DOE legal opinions in our draft are based on documentation given to us by the DOE Chief Counsel in Oak Ridge based on the relevance to the Oak Ridge National Laboratory public/private partnership. All statements in our report are within the context of how the citations were written. We clarified the author of the legal opinion and the subject of the memo.
31. Our report does not say that a conflict of interest and potential for fraud or wrongdoing existed in the Oak Ridge National Laboratory partnership. Rather, our report states that partnerships require monitoring because of the complicated relationships involved.

32. Our report states we used a case study approach and notes that this does not allow us to generalize our findings across the government. To analyze ESPC costs, we reviewed the delivery orders, given to us by GSA and the Navy, for each of our six ESPC case studies. In the course of our audit work we reviewed the ORNL study (*Oak Ridge National Laboratory, Evaluation of Federal Energy Savings Performance Contracting-Methodology For Comparing Processes and Costs of ESPC and Appropriations-Funded Energy Projects*, March 2003), interviewed the authors of the study, and talked with agency officials about the study's methodology. Based on our analyses we found two major flaws in the study: (1) as agreed with the study authors the sample size was too small and was not applicable to the entire federal sector and (2) the study compares the costs and savings across various types of ESPCs installed in several different federal facilities, making it difficult to compare energy savings because the savings would depend upon too many unpredictable factors. Also, as discussed on page 30, we did discuss with GSA and Navy officials their historical funding experiences.
33. It is the executive branch's long-standing position that the levels of internal executive branch funding requests are predecisional deliberative documents and therefore unavailable to us.
34. We acknowledge in our report that officials we spoke with said they believed M&V results in higher sustained savings. In this report, we take no position on whether M&V should be purchased, but agency officials said that measurement and verification is an expense that would not be incurred if the energy conservation measures were acquired through full, up-front appropriations. Additionally, representatives from energy service companies said that their private sector clients do not always purchase M&V and verification, and if they do, it is for a shorter period than contracts secured by the government. The lack of M&V being purchased in the private sector suggests it is worth exploring whether the amount of M&V purchased is a necessary expense for the government to incur whether the project is directly funded or obtained with an ESPC.
35. We include M&V in ESPCs costs because they are a required component of ESPCs to demonstrate that annual savings generated by ECMs meet or exceed contract payments. However, we exclude M&V from our proxy estimate of the cost if the ECMs were acquired through timely, full, and up-front appropriations because agency officials told us

that M&V is an expense that would not be incurred if the ECMs were acquired through timely, full, and up-front appropriations. See also comment 34.

36. While it may be that ESPCs do not result in an increase in agencies' utility bills, the ECMs acquired by all of our six ESPC case studies were more expensive than if ECMs had been acquired through timely, full, up-front appropriations. Thus, we do not consider ESPCs to be budget neutral over the long-term.
37. Our analyses were based on data obtained from final awarded delivery orders from case study contract files given to us by the Navy and GSA and was reviewed as part of technical comments on the appendixes by both the Navy and GSA.
38. It is unclear to us how DOE derived the "maximum possible percent increase (PV) financed through ESPCs over cost if direct funded." Using the data contained in the case studies' delivery orders, we attempted to replicate DOE's "best case assumptions" by subtracting M&V costs out of the comparison. We found that M&V represented a relatively small percentage of the ESPC contract cycle costs and thus did not significantly affect the increase in the costs attributed to ESPC financing versus timely, full, and up-front appropriations. For example, in the case of the federal courthouse in Gulfport, Mississippi, removing M&V costs from the comparison caused the percentage difference to decline from 56 percent to 51 percent, not to 26 percent as DOE suggests. The 51 percent difference reflects interest costs that GSA must pay to the ESCO over the course of the contract.
39. Funds for ESPCs are obligated on an annual basis; therefore, the budget does not recognize the government's full long-term commitment up front, when the decisions are made.
40. Since we used the delivery order to derive our proxy estimate, any avoided costs that were counted as a saving in that delivery were also counted as a saving in our proxy estimate. Our analysis assumes agencies acquire the same assets and avoid the same costs regardless of funding approach. Also, the savings from the avoided costs were used to make up-front payments in the contracts.
41. We do not contest agencies' use of simplified assumptions in M&V strategies. Rather, our concern is focused on the statement contained

in FEMP's July 2004 Super ESPC Agency Project Binder. On page 6 of the chapter entitled, "Introduction to M&V for Super ESPC Projects" it says, "In the event that the stipulated values overstate the savings or reductions in use decrease the savings, the agency must still pay the ESCO for the agreed-upon savings." It does not discuss other remedies against the ESCO nor does DOE's comment elaborate on what these remedies might include.

42. Our report acknowledges agencies' past experiences on page 33. Also see comment 32.
43. Large buy-downs indicate the availability of funds in the first year of the contract and so imply opportunities exist to acquire ECMs in smaller, useful segments, when technically feasible, with full, up-front appropriations instead of through ESPCs. Navy and GSA officials indicated to us that they typically did not consider financing ECMs through useful segments before deciding to use ESPCs. Moreover, we did not include the up-front payments made by Navy Region Southwest or Naval Submarine Base Bangor in this statement because these payments were made from an unexpected federal appropriation, which will not likely occur again.
44. As stated in our draft report agencies did not request full, up-front appropriations for the case studies reviewed in our report. Thus, it cannot be known how much might have been needed to develop surveys and studies to define projects in order to request direct appropriations. Business case analyses are well accepted as a leading practice among public and private entities. OMB requires all executive branch agencies to prepare business case analyses for major investments as part of their budget submissions to OMB. Also see comment 32.
45. See comments 24, 34, and 35.

Comments from the General Services Administration

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



GSA Administrator

November 5, 2004

The Honorable David M. Walker
Comptroller General
of the United States
Government Accountability Office
Washington, DC 20548

Dear Mr. Walker:

The General Services Administration (GSA) appreciates this opportunity to submit agency comments on the Government Accountability Office (GAO) "Draft Report to the Chairman, Committee on the Budget, U.S. Senate, *Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns*," GAO-05-55 (Draft Report). Energy Savings Performance Contracts (ESPC's) are an indispensable way for GSA to meet the aggressive energy goals set forth in Public Law 102-486 and Executive Order 13123, "Greening the Government through Efficient Energy Management."

Since GSA does not normally engage in any other type of public-private partnership, we will comment only with respect to ESPC's. We will address GAO's recommendation that Federal agencies undertake business case analyses before making capital financing decisions, and then we will address two of GAO's findings.

I. Business Case Analyses

GAO recommends in its draft report that "the Secretaries of Energy, VA, the Navy and the GSA Administrator perform business case analyses and ensure that the full range of funding alternatives, including the technical feasibility of useful segments, are analyzed when making capital financing decisions."

GSA's policy is to perform the business case analysis required by the Office of Management and Budget (OMB). OMB's July 25, 1998, memorandum "Federal Use of Energy Savings Performance Contracting" directs that factors such as whether the agency has a long-term need for the building; best value has been realized through competitive contracting procedures; and the ESPC agreement guarantees that the minimum savings to be generated by the improvements will cover the full cost of the Federal investment should be considered when deciding whether to use an ESPC. GSA has promulgated supplemental internal procedures to be followed when entering into an ESPC in its July 2, 1999,

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See comment 1.

memorandum "Alternative Financing of Energy Savings Projects." These procedures require the performance of a life cycle cost analysis as part of the ESPC evaluation process.

See comment 2.

GSA does not, however, always consider the full range of funding alternatives for energy conservation measures concurrently. GSA seeks appropriated funding for energy conservation projects before ESPC financing is considered. If an energy conservation measure is part of a larger whole-building modernization, it is considered for line-item prospectus-level repair and alterations funding. Funds are allocated to line-item prospectus-level projects by the National Office of Real Property Asset Management based on the business merits of the entire project, not just the energy conservation components of the project. Alternatively, an energy conservation measure may be submitted for funding through GSA's line-item energy appropriation. Projects funded in this manner are selected by the Energy Center in the National Office Expert Services Division based on criteria established by the Energy Policy Act of 1992, including simple payback, savings to investment ratio, and life-cycle cost.¹ Energy conservation projects that do not receive appropriations either as part of a larger line-item prospectus level project or from GSA's line-item energy appropriation are generally considered for financing through an ESPC.

II. Additional Comments

GSA has the following two additional comments on the draft report.

See comment 3.

A. GAO suggests that opportunities may exist to acquire energy conservation measures in smaller segments using direct appropriations rather than third party financing. Often, energy conservation measures cannot be undertaken as stand-alone projects because they are synergistic. For instance, chiller capacity and the "heat load" generated by lighting and other equipment are interdependent. We will, nevertheless, revise our energy conservation project evaluation process to include consideration of whether components of a larger project would reduce energy consumption even if the other components were never completed.

See comment 4.
Now on p. 29.

B. GAO states on page 22 of its report that "contract cycle energy costs savings specified by the contractor did not fully cover total contract cycle costs because agencies made up-front payments." We would like to clarify that, aside from ancillary up-front costs, such as asbestos abatement, that must be incurred in order to carry out the project at all, contractors for all of GSA's ESPC projects guarantee that project savings, including additional operations and maintenance costs, repair costs, and parts replacement costs that GSA would have incurred had the old equipment remained in place, will meet or exceed project costs during the contract term. GSA enforces these guarantees.

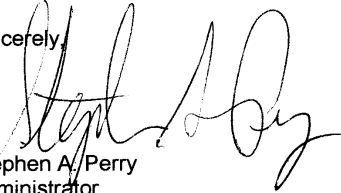
¹ Recently, line-item energy appropriations have been limited: as GAO notes in its draft report, GSA's budget authority for energy efficiency projects declined from \$20 million in fiscal year 1999 to \$4.2 million in fiscal year 2004, and it received no funds in fiscal years 2002 and 2003.

**Appendix VI
Comments from the General Services
Administration**

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Thank you for the opportunity to comment on the draft report. Should you have any questions, please contact me. Staff inquiries may be directed to Mr. Mark Ewing, Office of Applied Science, Expert Services Division, Public Buildings Service, at (202) 708-9296.

Sincerely,



Stephen A. Perry
Administrator

cc: Susan J. Irving
Director, Federal Budget Analysis
Strategic Issues

The following are GAO's comments on the General Services Administration's letter dated November 5, 2004.

GAO's Comments

1. While we recognize GSA's current procedures to perform life-cycle cost analyses as part of its ESPC evaluation process, life-cycle costing is only one aspect of a business case analysis. Both OMB's guidance and our *Executive Guide to Leading Practices in Capital Decision-Making* stress the importance of alternatives analysis as another component of building a business case. Such an analysis would consider the full range of funding alternatives. GSA does not analyze the full range of funding alternatives and therefore has an incomplete business case analysis.
2. We asked GSA staff in Atlanta whether GSA had requested appropriations for any of the case study ESPC projects we reviewed and were told that the field office had not submitted a request to headquarters because, given the \$6 billion backlog of repairs and alterations needed, the field office considered it unlikely that such funding would be approved. At headquarters, GSA budget officials told us that they do not specifically request funds up-front for ECMs because they are financed over time through ESPCs.
3. We recognize that it is not always possible to undertake energy conservation measures as stand-alone projects. Accordingly, our recommendation asks that the technical feasibility of useful segments be considered when making capital financing decisions. We commend GSA's decision to revise its energy conservation project evaluation process to include consideration of useful segments.
4. We agree that ESPC delivery orders are written to specify that project savings meet or exceed financed costs. However, the ancillary up-front costs also are specifically included in the contract and thus are a part of total contract cycle costs.

Comments from Veterans Affairs

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

October 25, 2004

Susan J. Irving
Director
Strategic Issues
U. S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Ms. Irving:

The Department of Veterans Affairs (VA) has reviewed your draft report ***CAPITAL FINANCING: Partnerships and Energy Savings Performance Contracts Raise Budgeting and Monitoring Concerns***, (GAO-05-55) and has several comments regarding the conclusions and recommendations. VA disagrees with the report's conclusions and recommendation to the Office of Management and Budget (OMB). Additional analysis should be undertaken to fully appreciate the contribution these asset management programs make to VA's mission and to the delivery of services to our Nation's veterans.

Implementation of the report's scoring recommendation to OMB would limit, discourage, and possibly eliminate the enhanced-used (EU) lease and energy savings performance programs. The demonstrated benefits of these programs and resulting services for veterans would be lost. As you know, VA uses EUs to transform underutilized or unused assets into services for our Nation's veterans, such as transitional housing, assisted living centers, and co-location of benefits offices with medical centers.

VA's use of state-of-the-art alternative financing programs and structures minimizes the impact on the Department's budget while achieving the infrastructure and programs that enhance VA's mission and maximize health care and benefits to veterans. Again, implementing the recommendation regarding additional scoring threatens to eliminate this enhancement to the veterans programs.

The enclosure provides additional comments to the draft report and otherwise addresses GAO's conclusions and recommendations. VA appreciates the opportunity to comment on your draft report.

Sincerely yours,

Handwritten signature of Anthony J. Principi in black ink.

Anthony J. Principi

Enclosure

Enclosure

The Department of Veterans Affairs (VA) Comments on the
Government Accountability Office's (GAO) Draft Report:
***CAPITAL FINANCING: Partnerships and Energy Savings Performance
Contracts Raise Budgeting and Monitoring Concerns***
(GAO-05-55)

GAO recommends that the Director of OMB work with the scorekeepers to develop a scorekeeping rule for the acquisition of capital assets to ensure that the budget reflects the full commitment of the government, considering the substance of all underlying agreements, when third party financing is employed.

Comments – OMB has scoring rules in place regarding Energy Savings Performance Contracts (ESPC) and partnerships. These scoring rules were recently updated to capture the different types of alternative financing being used across the federal sector. All significant projects (those with a total net present value over \$7M) are reviewed by OMB for compliance with this scorekeeping. The recent changes related to public/private partnerships are set forth to protect the government's interests, thus offsetting the need for full scoring of a project before its benefits and purpose become useful. Changing the scoring rules again would have a negative impact on all agencies seeking to use alternative financing mechanisms. Additionally, the private sector could view more changes to the scoring rules as increased risk. The end result could be discouraging private sector financing by creating more uncertainty in the private capital markets. In effect, the recommended changes would make alternative financing to the federal government unavailable.

GAO recommends the Secretaries of Energy, VA, and the Navy and the GSA Administrator perform business case analyses and ensure that the full range of funding alternatives, including the technical feasibility of useful segments, are analyzed when making capital financing decisions.

Concur - VA has in place a process to evaluate thoroughly business case and alternatives analyses for above-threshold capital investments. The Department's Capital Investment Program incorporates these, as well as risk, cost effectiveness, and earned value analyses and provides a useful tool to gauge a project's validity. The Office of Asset Enterprise Management is the lead office for both cost and technical implications pertaining to the Capital Investment Program for both ESPC and EU partnerships.

See comment 1.

Enclosure

The Department of Veterans Affairs (VA) Comments on the
Government Accountability Office's (GAO) Draft Report:
**COMPUTER-BASED PATIENT RECORDS: VA and DOD Efforts to
Exchange Health Data Could Benefit from Improved
Planning and Project Management**
(GAO-04-687)
(Continued)

Additional Comments

**GAO's analysis was confined to the government's cost and was not
a cost-benefit analysis.**

See comment 2.

Comment - GAO states that it did not use a cost-benefit analysis approach when considering its recommendation that scoring of all ESPCs and partnerships should be performed for all projects. It is unclear to VA how GAO can make such a recommendation without factual basis (i.e., a lifecycle cost analysis) to substantiate the report's findings, conclusions, and recommendations. Without a lifecycle cost analysis, there is no real assessment of the overall true economic value and long-term savings associated with these projects, whether financed through alternative means or funded through appropriations. A lifecycle cost analysis would show that a long-term alternative financing scenario has a lesser cost impact to the budget than a single, 1-year scoring of a project. Significant savings in the operation of these alternative financing projects would be realized and included in the overall lifecycle cost analysis. With notification to Congress, as described in the response below, this ensures that budgetary decisions are made in concert with the Office of Management and Budget (OMB) to achieve VA's objectives and mission.

ESPC commitments are not fully recognized up-front in the budget.

See comment 3.

Comment - VA disagrees with this statement. Throughout the draft report, GAO makes the assertion that information regarding total costing of projects for ESPCs and partnerships was invisible in the budget process. This finding/conclusion is erroneous. The case studies that GAO cited as part of its research on the enhanced-use leasing process suggest that this assertion is erroneous. Inherent in VA's enhanced-use leasing process were two notifications to congressional oversight committees for all projects. In these notifications (the first being a 90-day waiting period, and the second being a 30-day period), there is a full disclosure of the projects being considered and the budgetary impacts for both the short and long term. Congress has the opportunity at those two instances to inform VA that these projects should not be pursued through enhanced-use leases, or should be inserted into the Department's budget and receive appropriated funds for accomplishment. Likewise, before a contract is finalized for ESPCs that total over \$10M, Congress is again notified for a period of 30 calendar days of the budgetary impact of the project for the short and long term. Again, Congress has the opportunity to

Enclosure

The Department of Veterans Affairs (VA) Comments on the
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(GAO-04-687)
(Continued)

See comment 4.

inform VA to include those projects in its annual budget. Also, starting with the FY 2004 VA budget submission, all enhanced-use leasing projects are identified by line item. In fact, VA had previously submitted several projects through the budget process, requesting appropriated funds, but the requests were disapproved -- with the direction to pursue enhanced-use leasing. There has been absolutely no hiding of any budgetary issues from Congress. In addition, both VA's appropriation and authorization committees are fully aware of VA's enhanced-use lease program and its projects. Congress has continued to encourage VA to increase our use of enhanced-use leasing. In addition, VA reports these activities on its financial statements and is upgrading this reporting for FY 2004 to increase the budget transparency of these activities.

Partnerships indicate a long-term commitment by the government.

See comment 5.

Comment – VA disagrees with this statement. GAO asserts that regardless of how partnerships were structured, they had features that indicate a long-term commitment by the government. This statement inaccurately describes the financial and management structure used for VA's enhanced-use lease projects. The transactions are structured relative to a performance-based contract. If the prescribed performance is not achieved, VA has the right to default the lease without future payment. Furthermore, if VA should decide to cease operations, the payments are not required. VA is committing itself to 2-year agreements for the use of space or the purchase of energy products, but VA is not committing or implying a long-term commitment to those purchases. This approach allows VA the flexibility to adjust its infrastructure to meet changing workload requirements. The approach also provides VA with significantly more flexibility to react to market changes than traditional government-funded direct appropriated projects.

The following are GAO's comments on the Veterans Affairs letter dated October 25, 2004.

GAO's Comments

1. Given recent congressional action to extend ESPC authority through fiscal year 2006, we have revised our draft to recommend that OMB require, and suggest that Congress should consider requiring agencies that use ESPCs to present to Congress an analysis comparing total contract cycle costs of ESPCs entered into during the fiscal year with estimated up-front funding costs for the same ECMs.

We have better emphasized and clarified in the report that OMB updated and revised its instructions in 2003 to address lease-backs from public/private partnerships. According to OMB staff, some of the partnerships we reviewed may have been scored differently under the revised guidelines. However, we still believe the scorekeeping rules should continue to be refined to ensure that the full commitment of the government is considered in the budget.

2. We have added language to clarify further that our report looked at the government's cost of acquiring assets. Evaluating the benefits of the assets was not one of our objectives. We assume that the same assets would be acquired regardless of how they are financed and thus they would have identical benefits and operating costs. Given our objectives, focusing our analysis on the government's cost of financing the assets' acquisition was the appropriate approach for this report. Recognizing costs up front does not prohibit discussion of future benefits when requesting appropriations.
3. The statement that ESPC commitments are not fully recognized up-front in the budget does not refer to VA's enhanced use leases. Further, although congressional notification is an important and valuable process, it does not constitute recognition in the budget.
4. Our report does not state that VA or other agencies included in our review have deliberately hidden budgetary information from Congress. Nor do we dispute that Congress has continued to encourage VA's use of enhanced-use leasing. Clearly, enhanced-use leases were explicitly authorized by law. Rather, when these leases are structured such that developed property is leased-back in short-term increments, OMB's interpretation of the budget scoring rules permitted only the short-term costs associated with these assets to be scored in the budget. Finally,

with respect to prior requests for appropriated funds, VA officials explained to us that while requests had been submitted for regional offices, requests had not been submitted for the Atlanta regional office or other case studies in our review.

5. The lease-back agreements we reviewed had features that indicated a long-term commitment by the government. They were structured such that the government's legal commitment was confined to short-term periods. Accordingly, OMB's interpretation of the budget scorekeeping rules required that only these short-term costs to be recognized up-front in the budget. However, recording only the 2-year legal commitment understates the likely longer term costs of the government. For example, prior to the enhanced-use lease used to develop a collocated regional office in Atlanta, the regional office had occupied offices in that area for over 25 years. While it is certainly possible that VA may choose to discontinue operations in the Atlanta area, in our opinion reflecting zero cost beyond the 2-year legal commitment overstates the chances of this occurring.

GAO Contact and Staff Acknowledgments

GAO Contact

Christine Bonham, (202) 512-9576

Acknowledgments

In addition to the contact person named above, Carol Henn, Maria Edelstein, Sandra Beattie, Dewi Djunaidy, Scott Farrow, Hannah Laufe, David Nicholson, and Adam Shapiro also made significant contributions to this report.

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